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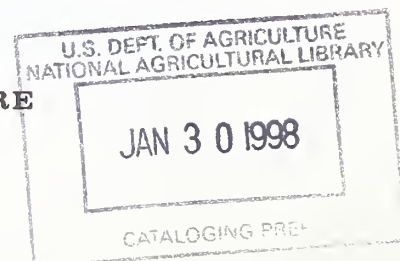
THE AGRICULTURAL SITUATION IN COMMUNIST AREAS

EASTERN EUROPE, THE SOVIET UNION,
AND MAINLAND CHINA

Review of 1968 and Outlook for 1969

U.S. DEPARTMENT OF AGRICULTURE
ECONOMIC RESEARCH SERVICE

Washington, D.C.



FOREWORD

The Agricultural Situation in Communist Areas: Review of 1968 and Outlook for 1969 presents a comprehensive review of agricultural developments in the major Communist areas of Eastern Europe, the Soviet Union, and Mainland China, with emphasis on major agricultural and economic developments of concern to U.S. agricultural interests. Mainland China is included for the first time in this report and Western Europe is now the subject of a separate report.

This report was prepared under the direction of Harry E. Walters and written by Marion R. Larsen, Roger E. Neetz, and David M. Schoonover. Tables in the statistical appendix were compiled by Carolyn E. Miller. Acknowledgment is extended to the Foreign Agricultural Service, especially Agricultural Attache personnel, for assistance.

The Agricultural Situation in Communist Areas is one of five regional supplements to The World Agricultural Situation: Review of 1968 and Outlook for 1969, FAER 50. Other regional reports will be published on Western Europe, Africa and West Asia, the Western Hemisphere, and the Far East and Oceania. Data in this report may vary slightly from those in The World Agricultural Situation, as this is based on information available as of March 1, 1969.



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THE AGRICULTURAL SITUATION IN COMMUNIST AREAS

SUMMARY

The Communist countries of Eastern Europe, the Soviet Union, and China showed generally good agricultural results in 1968. In the Soviet Union, output was up 9 points in the USDA index of net agricultural production (table 1). In Eastern Europe, no change developed and in China, there was a slight decline. But in both instances output was still near the peak levels of 1966 or 1967. Declines of from 5 to 18 points developed in the Danubian countries of Eastern Europe--Bulgaria, Romania, and Yugoslavia--all of which experienced a prolonged spring drought. The slight decline in East Germany was from the 1967 record high. Output grew 7 points in both Czechoslovakia and Poland.

An important factor in 1968 agricultural performance in the USSR and Eastern Europe was the relatively good showing these countries made despite less than favorable weather conditions in many regions. At least some measure of credit for withstanding these adversities must be attributed to the major effort to improve and expand agricultural production in these countries after the dismal performance by most of them during 1960-63. Policy changes in these countries since 1963 have resulted in the increased availability of such critical inputs as fertilizer and machinery (table 12), higher levels of agricultural investments and prices, greater incentives to agricultural producers, and better production and marketing practices.

Crop production showed mixed results in the Soviet Union and Eastern Europe. (Area and production data for the USSR and Eastern Europe can be found in tables 7 and 8 on pages 31-32.) Grain output at 141.5 million tons in the USSR was less than 5 million tons below the 1966 record. ^{1/} In Eastern Europe, grain production was down less than 1 million tons from the 1967 record. Compared with the 1960-64 average, grain output in 1966-68 was up more than 11 million tons in Eastern Europe and 32 million tons in the USSR. Wheat production continued to show the greatest gain since 1960-64; 1968 production was up 7 million tons in Eastern Europe and 28 million tons in the USSR from the earlier average. Corn production in Eastern Europe was down 3 million tons from the 1966 record, but still well above the 1960-64 average. The supply of coarse grains in Eastern Europe was above the 1960-64 level, but not up as much as wheat.

Sugarbeet production was down in Eastern Europe compared with the 1967 record but well above the 1960-64 average. The 1968 USSR sugarbeet crop was a new record. Cotton output held steady in the USSR, but declined in Eastern Europe where small quantities are produced only in Bulgaria and Yugoslavia.

^{1/} All tons are metric unless indicated otherwise.

Oilseed production rose 5 percent in Eastern Europe and was up slightly in the USSR. Output in 1968 was 1 million tons above the 1960-64 average in Eastern Europe and 2 million tons above that average in the USSR.

Potatoes, a major food and feed crop in Eastern Europe and the USSR, registered record-high harvests in both regions.

In China, the fragmentary data available indicate that all crops were below the relatively good levels achieved in 1967. Grain production was down slightly; cotton was also down; and oilseeds were down with the largest declines indicated for soybeans and peanuts.

All components of livestock product output were up in the USSR and Eastern Europe in 1968. Although new records were achieved and output of meat, milk, eggs, and wool was much above the 1960-64 level, the rate of increase slowed in 1968. (Data on livestock numbers and output can be found in tables 9 and 10 on pages 33-34.)

Livestock numbers leveled off or declined slightly throughout Eastern Europe and the USSR in 1968 reflecting the lack of major improvements in feed supplies since 1966, and the effect of new policies designed to maintain a better balance between livestock numbers and feed supplies. In China, the livestock sector probably held at about the 1967 level for both numbers and output.

The period 1966-68 was one of attaining a new higher plateau of agricultural output in the USSR and Eastern Europe. Weather partly explained this improvement, but some of the measures which stimulated output after the serious agricultural difficulties of the early 1960's, showed signs of slackening in 1968--the third year of the current 5-year plan in these countries. The most serious signs of a slowdown appeared in the USSR. Strong statements by Soviet leaders during late 1968 indicated concern over the slow pace of agricultural assistance programs.

The improved grain situation in all three Communist areas in 1966-68 compared with 1960-64 has altered sharply their impact upon the world grain market. The USSR has returned to that market as a major exporter with limited imports. Eastern Europe's imports of grain remain large because of the constant demand of the northern countries of East Germany, Czechoslovakia, and Poland, but exports by the Danubian countries increased sharply after 1964. In 1967, exports of 4.3 million tons did much to offset imports of 6.3 million tons. In addition, the USSR supplied a much larger proportion of these imports than in 1963-65.

World market pressures were also noted in the 1966-68 period because of increased exportable supplies of cotton, sugar, and vegetable oils by the USSR and some Eastern European countries.

Grain imports of Mainland China declined in 1967 and 1968 to about half the level of 1964-66. China's agricultural exports also declined in 1967 and early 1968 but began to move upward in the last half of the year.

The outlook for agriculture in the major Communist areas in 1969 is for modest growth. Policies which produced the improved 1966-68 situation are ex-

pected to continue. The relatively slower growth rate of output at this new high level is expected to continue since no major policy developments appear imminent. Weather patterns closer to average should improve performance in the Danubian countries of Eastern Europe while in the northern countries of that region continued relatively slow progress is expected.

China is expected to have a better 1969 agricultural year if near average weather prevails and if Cultural Revolution activities continue to be contained.

The USSR should do about as well as in 1968 with fluctuations in crop output hinging on weather variabilities in that large and complex region. Improved performance in the livestock sector should help raise agricultural production. The favorable fall conditions for winter grains were dampened by adverse weather in December and January. Spring and summer weather will determine the final harvest.

Continued export pressure by the USSR should be evident in 1969 in grains, sugar, cotton, and vegetable oils with some relaxation noticeable in the latter two. Grain exports by the Danubian countries should decline in 1969 because of the output declines in these areas in 1968. Grain imports by Mainland China are expected to match or exceed the 1968 level.

Table 1.--Eastern Europe and Soviet Union: Indexes of agricultural production, total and per capita, 1962-68 ^{1/}

Country	(1957-59 = 100)													
	Total							Per capita						
	1962	1963	1964	1965	1966	1967	1968	1962	1963	1964	1965	1966	1967	1968
Bulgaria.....	110	111	127	132	155	152	134	106	106	120	124	145	141	124
Czechoslovakia.....	98	108	110	95	111	113	120	95	104	105	90	105	106	113
East Germany.....	99	100	105	111	111	122	121	100	101	107	113	113	124	123
Hungary.....	101	104	107	110	117	119	119	99	102	104	107	114	115	114
Poland.....	109	118	121	123	129	135	142	103	111	112	112	117	122	127
Romania.....	103	107	112	123	141	139	134	100	103	107	117	133	130	125
Yugoslavia.....	102	109	117	108	131	126	119	98	103	109	100	120	114	106
Eastern Europe....	104	110	115	116	127	130	130	101	106	110	110	120	122	121
USSR.....	109	103	122	116	137	134	143	102	95	111	104	121	118	124
Eastern Europe and USSR.....	107	106	119	116	133	133	138	101	99	110	106	120	119	123

^{1/} These USDA indexes are based on the value of calendar year crop and livestock product output, weighted in terms of 1957-59 average West European producer or wholesale prices, in U.S. dollars. Deductions are made for the value of crops used to produce livestock output. This deduction is based on the value of the output assigned to feed in Food Balances for 8 East European Countries, 1959-61, ERS-Foreign 124, Economic Research Service, U.S. Department of Agriculture.

SOVIET UNION

RECORD AGRICULTURAL OUTPUT IN 1968

Agricultural production in the USSR reached a record level in 1968, largely on the basis of improved grain output combined with continued high output of industrial crops and livestock products. The USDA preliminary index of net agricultural production shows an increase of about 7 percent over 1967, but of only 4 percent above the previous record level in 1966 (table 1). ^{1/} A preliminary Soviet estimate placed 1968 gross agricultural output at 81 billion rubles (one ruble equals \$1.11 at the official Soviet exchange rate)--up about 3.5 percent from 1967. The annual plan called for a 7.4-percent gain in gross agricultural output in 1968. For the first 3 years of the current 5-year plan, 1966-70, the Soviet index of gross agricultural output averaged about 19 percent higher than during 1961-65, compared with the 25-percent increase targeted for the plan period.

Although agricultural production reached a record level, growth has been relatively slow since 1966, and production in industry has outpaced that in agriculture. In 1968 industrial output reportedly achieved the planned growth rate of 8.1 percent. Rates of growth in light industry and the food industry were 9 and 5 percent. National income grew at a rate of 7.2 percent during 1966-68, maintaining the same pace in 1968. This was slightly better than planned. Real income per capita reportedly increased by 6.1 percent in 1968.

Growing conditions, on the whole, were not especially favorable in 1968, as reflected in the output of several crops and livestock products. Precipitation during the winter of 1967/68 replenished low soil moisture reserves in the southern part of the European USSR and in much of the region east of the Volga River. However, in spring and early summer, drought struck the Ukraine and southern regions and part of the eastern region. Drought affected pastures and early crops, but good rains during the middle and latter parts of the summer in much of the country helped the development of late-season crops. Areas adjoining the Volga and Urals were particularly favored by rainfall in 1968. Weather

^{1/} The USDA index of Soviet agricultural production measures the final output of major crops and livestock products using USDA estimates and weighted by 1957-59 West European producer prices. It does not measure changes in livestock numbers or changes in the weight of live animals. Seed and waste are considered constants. Net output is estimated by deducting feed inputs as a constant percentage of the value of livestock production--meat, milk, eggs, and wool. The index is more sensitive to changes in final output than would be the case with indexes valuing changes in livestock numbers and/or the weight of live animals.

conditions generally facilitated harvesting except in Siberia and Kazakhstan. In these areas, winter came unusually early and snow covered the fields in early September.

Grain output in 1968 was second only to the bumper 1966 crop. Soviet officials announced a harvest of 169.2 million tons of grain (including pulses). After adjusting for excess moisture and foreign matter, production in excess of 140 million tons is estimated by USDA, an increase of about 13 percent over 1967 (tables 7 and 8). ^{2/} The Soviet Government reported procurements (purchases from farms) of about 69 million tons of grain compared with 57.2 million in 1967. Grain storage problems were reported in 1968, as supplies of new-crop grain exceeded available storage capacity.

Although weather was the principal reason for the difference between the 1967 and 1968 grain harvests, several elements are involved in the generally higher level of output in recent years. Official Soviet data show that 1968 production was about 30 percent above the 1961-65 level. The major identifiable influences include: (1) shifts to improved varieties of grain, particularly of winter wheat; (2) increased use of mineral fertilizer and lime, especially in the European USSR; (3) greater use of better farming practices, such as fallowing and stubble-mulching, in the areas east of the Volga River; and (4) expanded use of pesticides, particularly herbicides. Improvements in economic levers, such as prices and incentives, and in mechanization also occurred, but these influences are less readily measurable.

Wheat production (adjusted basis) in 1968 is estimated at 78.5 million tons--an increase of almost 15 million from 1967. Although winter wheat output declined an estimated 5 to 10 percent, spring wheat output jumped almost 50 percent. Bumper harvests were reported from the Volga and Urals regions. The government reported procurement of about 48 million tons of wheat, compared with 38.2 million tons in 1967. The level of procurements is about 15 million tons in excess of the typical level of government domestic utilization of wheat during the first half of the 1960's, suggesting that the government has large amounts available for stocks or exports during 1968/69. At the same time, wheat left on farms totals more than 10 million tons greater than the average amount during the first half of the 1960's.

Production of feed grains--barley, oats, and corn--is estimated at a record level of almost 40 million tons after holding at about 38 million tons in the 2 previous years. Barley, which contributes more than half of feed grain output, apparently was the biggest gainer. Major spring barley areas were favored by good growing conditions and dry weather at harvest. Corn yields and production were depressed about 5 percent by dry conditions in the southern regions of the country. Most of the additional feed grains probably will be utilized to raise domestic livestock production, although some increase in exports, especially in Eastern Europe, is likely.

^{2/} Downward adjustments are made in USSR grain, oilseed and potato production and yield figures to eliminate excess moisture and foreign matter which appear in the Soviet reported "bunker weight" figures for these crops.

Rice was the most notable gainer among other grains. Production increased 17 percent to about 950,000 tons in 1968, compared with average output of about 350,000 tons during 1961-65. More than 160,000 hectares of new rice area have been brought into production since 1965. About 300,000 hectares were planted to rice in 1968. 3/ Although almost 400,000 tons of rice were imported in 1967, eventual self-sufficiency is planned.

Production of oilseeds held steady in 1968. Sunflower seed output of 6.1 million tons (USDA adjusted basis) was little changed from 1967. Drought-resistant characteristics of the sunflower apparently enabled the crop to withstand the dry weather during the spring and summer in the eastern Ukraine and North Caucasus. Yields declined only about 2 percent. Moreover, area made a surprising upturn from the previous year. Government procurements were about equal to the 4.9 million tons purchased in 1967.

Fiber crop output also changed little in 1968. Cotton output of slightly less than 6 million tons (unginned) has held relatively stable for the past 3 years. Considerable replanting of cotton was required in Central Asia after damaging hail and hard spring rains, but harvested area apparently was at least as great as in 1967. Cotton yields declined slightly. The output of flax fiber increased an estimated 3 percent to 500,000 tons.

Sugarbeets yielded a record-high harvest of 26.3 tons per hectare and production spurted to 93.6 million tons, despite an area decline of more than 6 percent. The previous record yield was 22.9 tons in 1967. Sugarbeets have been especially favored in the distribution of mineral fertilizers during the past 5 years. Sugarbeet growth was helped by summer rainfall in the western Ukraine and the central black earth region. A mild fall facilitated the harvest. The bumper crop was expected to overload refining capacity, resulting in a reduced extraction rate due to processing delays. About 9.6 million tons of sugar were processed from the 1967 harvest, which was about 7 percent smaller than the 1968 harvest.

Output of potatoes, fruit, and grapes was favorable, but vegetables suffered from the spring drought. A record 91 million tons of potatoes (USDA adjusted basis) were harvested. Fruit production has been accelerated by the sharp expansion of orchards in the 1960's. Since 1965 the area of bearing orchards has jumped about one-fourth. Consequently, much of the recent increase in fruit production--to 5.5 million tons in 1967--is expected to be maintained. The area of bearing vineyards has remained relatively stable, but a bumper crop estimated at 4.2 million tons was harvested in 1968. Vegetable production declined 10 percent to 18.5 million tons.

Livestock inventories generally declined in 1968 (table 9). Cattle numbers slipped by 1.5 million to 95.7 million head at the end of the year. About 80 percent of the reduction occurred in the private sector. Poor pasture conditions and uncertainties about the feed supply probably played a role in these reductions. Hog numbers declined by 1.9 million to 49.0 million head. The reduction was shared about equally by the socialized and private sectors. Numbers dropped for the third successive year. Much of this decline has been

3/ See page 44 for conversion factor.

associated with a trend toward specialization. In turn, this has led to a reduced supply of pigs on many farms for sale to the private sector. In contrast to cattle and hogs, numbers of sheep and goats increased by 2.1 million to 146.1 million head.

Growth in output of livestock products slowed perceptibly in 1968 (table 10). Both meat and milk showed the slowest rates of gain since 1964, which followed a year of crop failures. Drought conditions and number reductions both played a role. More substantial progress was made in increasing egg and wool output. Output of all major commodities was at record levels, however. The socialized sector has consistently improved animal efficiency over the past 4 years (table 2). Productivity generally is considerably higher than in the private sector. Increased feed availability per animal in recent years is a major factor.

Table 2.--USSR: Livestock productivity on collective and state farms, average 1962-64, and annual 1965-68

Item	: : 1962-64 : average :	: 1965	: 1966	: 1967	: 1968
Milk yield per cow (kilograms).....	1,672	1,987	2,021	2,128	2,232
Wool sheared per sheep (kilograms)...	2.6	2.87	2.89	2.95	3.02
Rate of lay per hen (eggs).....	101	132	138	143	152

Despite the slowdown in livestock production, the level of state purchases of major livestock products has continued to exceed the annual targets in the current 5-year plan. State purchases of nearly 12 million tons of meat (live-weight) and 44 million tons of milk both are in excess of the 1970 targets, and purchases of 14 billion eggs are 1 billion short of 1970's goal, but more than 2 billion in excess of 1968's.

AGRICULTURAL PRIORITIES REEMPHASIZED

During the first 3 years of the current 5-year plan, the priority of agriculture was strengthened and substantial progress was made in increasing output. The average level of total agricultural investments jumped by more than one-half over the previous 5-year period and the share of agriculture in total investments in the economy rose from 19 to 22 percent. Gross agricultural output rose about 19 percent, on the average.

Agreement has not been unanimous on the priority of agriculture in the current 5-year plan, however. After exceptionally favorable agricultural results during the first year of the plan, Dmitriy S. Polyanskiy, First Deputy Premier and Politburo member warned that "several comrades are beginning to argue that collective and state farms can now develop with less substantial help and that it is possible now to cut back on the amount of land improvement and to

lessen deliveries of equipment and mineral fertilizers to agriculture." ^{4/} Although Polyanskiy remained a strong proponent of the needs of agriculture, there were indications by the end of 1967 that the investment program had been reduced. In a report to the October session of the Supreme Soviet of the USSR on the 1968-70 plans, N. K. Baybakov, Deputy Premier and Chairman of the State Planning Commission, noted that state productive investment in agriculture during 1966-70 would increase by 76 percent over the previous 5 years. The original program laid out by Leonid I. Brezhnev, General Secretary of the Soviet Communist Party, at the agricultural plenum in March 1965 had indicated a doubling of these investments.

Difficulties in achieving investment goals in agriculture were substantiated by Brezhnev in his speech at the October 1968 Party plenum, the first major agricultural policy statement in 2½ years. ^{5/}

...For the first 3 years of the 5-year plan, capital investments (state centralized productive) ^{6/} were set at 21.2 billion rubles. In fact, they will amount to 17.7 billion rubles, that is, almost 4 billion less. Capital investments were also lowered in the mineral fertilizer and agricultural machine-building industries. As a result, fewer tractors, trucks, agricultural machines, and mineral fertilizers have been supplied to agriculture in the years 1966 to 1968 than had been envisaged.

Brezhnev went on to score the shortfalls in meeting agricultural investment targets. He noted that funds earmarked for agriculture were being siphoned off for other purposes.

Surprisingly, total investment in Soviet agriculture has maintained a steady annual growth rate of about 11 percent in the 1960's (except in 1964 when investments jumped 20 percent). The rate of increase reached 12 percent in 1968 (table 3). Agricultural investments by collectives and by the state have shown different patterns. After major price increases in 1965 and good crops in 1966, the rate of investment by collective farms increased much faster than the rate of investments in state agricultural enterprises during 1966-68. The growth rate of investment in state agricultural enterprises slowed to about 8 percent although a growth rate of about 15 percent was needed to obtain the planned doubling in these investments during 1966-70.

If the 1969 investment targets are met and a similar increase occurs in 1970, total investment will approximate the planned 71 billion rubles, and total

^{4/} Pravda, March 3, 1967.

^{5/} Pravda, October 31, 1968.

^{6/} Soviet statistics divide investment into "productive" and "nonproductive" categories. The latter include investments in social projects, such as housing and public amenities, whereas the former are in objects of a more direct productive nature. Investments also may be centralized--grants from the state budget--or decentralized--made from enterprise retained earnings. State centralized productive investments refer to investments in objects of a productive nature which are included in the state budget.

state investment will reach about 41 billion rubles. But this will include investments in non-production projects, such as housing and public amenities, which presumably were excluded from the original investment plan.

Disproportionate increases in specific types of agricultural capital and inputs may also be causing concern to the Soviet leadership. This was especially evident in 1968 (table 3). Deliveries of tractors and grain combines to agriculture increased only 2 percent--less than in previous years of the current plan; truck deliveries held steady. Less new land was brought under irrigation than the year before, and drained land increased only 2 percent. Fertilizer deliveries slowed perceptibly. Much of the investment went into construction where completion rates have been notoriously poor.

The 1969 plans announced in December indicate a continuation of the trends observed in 1968. If a similar rate of increase occurs in 1970, tractor and grain combine deliveries will be 17 and 13 percent below plan, respectively, and truck deliveries will fall short by more than one-third; new irrigation and drainage will be one-third short of plan; and mineral fertilizer deliveries will be about 10 million tons less than the revised 1970 target of 52 million tons.

The October 1968 plenum on agriculture, apparently motivated by these problems, was an attempt to reemphasize the priority of agriculture. Strangely, the successes of agriculture during the past 3 years probably eroded the position of the agricultural supporters in the government. The Brezhnev plenary report was an attempt to prevent a feeling of overconfidence that agricultural problems had been solved and that resources could be diverted elsewhere. Whether Brezhnev's strong statements signal a reversal in the recent slowdown in deliveries of needed resources to agriculture is not clear. No significant improvement is reflected in the 1969 plan.

Some signals of the reemphasis on agriculture appeared in 1968 prior to the plenum. A program was adopted in May to double capacity in the mineral fertilizer industry from 47 million tons in 1968 to 95 million tons in 1972. Capacity is planned to expand by 25.5 million tons in 1969-70 compared with 12 million tons during the first 3 years of the current plan. Investments in the mineral fertilizer industry are planned to increase 55 percent in 1969. A decree was adopted in September to increase the volume of agricultural machinery production to 2.01 billion rubles in 1969 and 2.19 billion rubles in 1970. These production values, however, although well above the 1.77 billion rubles achieved in 1968, will not enable attainment of the 10.7 billion rubles during 1966-70, as promised by Brezhnev in March 1965.

Insights into the 1971-75 plan and its policies were contained in Brezhnev's report to the October 1968 plenum. The present program of fixed procurement levels on grains with 50 percent bonuses for sales above-plan, will be retained in general. Proposals to extend these bonuses to other commodities are being considered. Present prices will also be maintained except on cotton, vegetables, and poultry. The Soviet Government announced in February 1969 that the average cotton procurement price had been raised 15 percent. Proposals to distribute as bonuses to workers the premiums received by state farms from above-plan sales also are under consideration.

Table 3.--USSR: Investment and inputs in agriculture, 1965-68, 1968-69 Plans

Item	1965	1966	1967	1968	1968 Plan	1969 Plan	1965	1966	1967	1968	1968 Plan	1969 Plan
Capital investment												
State enterprises.....	6,036	6,490	7,020	1/8,100	2/8,200	3/9,400	12	8	8	15	17	16
Collective farms.....	4,318	4,888	5,576	6,000	6,000	6,400	10	13	14	8	8	7
Total.....	10,354	11,378	12,596	4/14,100	5/14,200	6/15,800	11	10	11	12	13	12
Machine deliveries												
Tractors (physical units).....	239.5	276.0	287.4	292	307	306	8	15	4	2	7	6
Trucks.....	70.2	105.5	108.1	7/108	8/122	9/155	11	50	2	0	13	44
Grain combines.....	79.4	86.4	96.0	98	n.a.	100	1	9	11	2	n.a.	2
Land improvement ^{10/}												
New irrigation.....	396	377	323	264	n.a.	310	6	-5	-14	-18	n.a.	17
New drainage.....	686	749	757	771	n.a.	820	-3	9	1	2	n.a.	6
Fertilizer deliveries												
Gross weight.....	27.1	30.5	33.7	36.3	35.2	38.5	23	13	10	8	4	6
Nutrient weight.....	6.30	6.99	7.75	11/8.35	n.a.	11/8.85	25	11	11	8	n.a.	6

^{1/} Residual. ^{2/} Centralized investment only; the 1969 Plan includes 760 million rubles of noncentralized investment. ^{3/} Estimate, based on planned 18.6 percent increase in state centralized productive investment. ^{4/} Based on reported 12 percent increase. ^{5/} Includes planned collective farm and centralized state investment only; investment categories not entirely consistent with previous years. ^{6/} Estimate, based on planned increase in state centralized production investment and planned collective farm investment. ^{7/} Estimate, based on reported deliveries of 146,000 trucks and specialized motor vehicles, the same as in 1967. ^{8/} Estimate, based on planned 13 percent increase in total trucks plus specialized motor vehicles. ^{9/} May include other specialized motor vehicles. ^{10/} Gross area improved during the year and not net additions to irrigated and drained land. ^{11/} Estimate, based on typical nutrient content.

n.a. = Not available.

Sources: Unless otherwise noted: 1965-67--Narodnoye khozyaystvo SSSR v 1967 g.; 1968 preliminary--Pravda, Jan. 26, 1969; 1968 Plan--Pravda, Oct. 11, 1967, and Ekonomicheskaya gazeta, No. 1, 1968, p. 23; 1969 Plan--Pravda, Dec. 11, 1968; Percentage increases are computed.

Brezhnev also announced some general output goals "for the near future." Although not explicit, the levels apparently hoped to be achieved during 1971-75 are shown in table 4.

Table 4.--USSR: Agricultural output goals
for the "near future"

	<u>Million metric tons</u>
Grain.....	190-200
Cotton, unginne.....	7
Sunflower seed.....	7
Sugarbeets.....	90
Potatoes.....	115
Meat.....	14-15
Milk.....	90-95
Wool.....	0.48-0.50
	<u>Billions</u>
Eggs.....	45-50

Compared with output in 1968, the new targets on grain, cotton, potatoes, milk, and wool represent increases of 10 to 20 percent. The target for meat is up one-fourth and that for eggs is one-third higher. Only a 5-percent increase in sunflower seed is called for and the sugarbeet goal actually is 4 percent below 1968 output.

The state farm experiment in financial autonomy, begun in 1967, more than any other agricultural reform resembles the reforms now underway in industry. In July of that year about 400 of the more than 12,000 state farms were transferred to an essentially financially autonomous status. 7/ An additional 400 farms were shifted to this basis in 1968.

Preliminary results of the experiment indicate that both economic incentives and profitability markedly increased on the farms transferred to the new system, although many problems remained. One problem is the tendency for farms to attempt to boost wage bonuses by lowering planned profits and by increasing planned costs. Another is the disparity in profitability among the various commodities the farms must produce. A third problem is that the new planning rights granted to farms are frequently violated by higher administrative authorities.

Despite the problems, the general results apparently have been satisfactory. An additional 2,900 state farms are to be shifted to financial autonomy in 1969. This will bring the total number to 3,700 or 29 percent of all state farms in the Soviet Union. The level of profits attained should be improved by extension

7/ See The Europe and Soviet Union Agricultural Situation, ERS-Foreign 220, April 1968, for a more complete description of this reform.

of the reform, because the affected farms will receive the higher level of prices paid to collective farms for commodity sales.

Payments in cash and kind to collective farmers in 1968 increased by about 6.5 percent, compared with a general increase of about 7.5 percent for other workers in the economy. During 1966-68 incomes of collective farmers grew at an average annual rate of 9.2 percent (30 percent in total), compared with a planned rate of 6.7 percent. The greatest increase of about 16 percent occurred in 1966, but this dropped to 6 percent in 1967. The average wage of other workers grew by about 5.2 percent (16 percent in total), compared with a planned 3.7-percent rate for the 3-year period. Further increases of 7.5 percent and 3.3 percent in the earnings of collective farmers and other workers, respectively, are planned for 1969. The 5-year plan directives called for corresponding average increases of 38 and 20 percent during 1966-70, and good progress apparently has been made toward attaining these goals.

By the end of 1967, nearly all collective farms were reported to have switched to the system of regular monthly payment introduced in July 1966, but problems remained in securing credits to cover the payment obligations. The Soviet Minister of Finance, V. F. Garbuzov, emphasized in his annual report that the 1969 budget contains provisions for credit to collective farms which are unable to meet the planned level of labor payments from their own resources.

In December 1968 the USSR Supreme Soviet enacted a new land use law. The law reaffirms government ownership of all land with provisions for assignment to enterprises and individuals, and increases responsibility for land, stipulating penalties for improper land use. A major feature of the law is the requirement of an official land cadastre--a survey and record of the quantity, value, and ownership of all real estate--to be used in planning, pricing, and other economic activities. The law mentions the continued assignment of individual plots for private use.

FOOD CONSUMPTION PATTERNS IMPROVE

The structure of the Soviet diet has continued to improve in recent years (table 5). During 1966 and 1967 per capita consumption of meat, dairy products, eggs, fish, sugar, and vegetables increased. Consumption of grain and potatoes declined. Vegetable oil consumption was greater in 1967 than in 1966, but a surprising decline was reported from the 1965 peak. Consumption of fish and sugar has increased most sharply since 1960, but meat and egg consumption has gone up most rapidly since 1965. The share of total calories in the diet supplied by grain and potatoes declined from roughly 70 percent in 1950 to 60 percent in 1960 and 55 percent in 1967.

Based on the reported changes in retail trade, the major increases in consumption in 1968 involved fruit, cheese, whole milk products, and eggs--all of which were up by 10 percent or more. The sale of grain products was down by 1 percent. Domestic vegetable oil and butter sales increased by 5 and 7 percent, respectively. These relationships may be compared with a 1-percent increase in population during 1968 to 239 million people on January 1, 1969.

Table 5.--USSR: Per capita consumption of selected food products,
1950, 1960, 1964-67

Product	1950	1960	1964	1965	1966	1967	1967 as share of: 1960
	<u>Kilograms</u>						<u>Percent</u>
Meat, meat products, and lard in terms of meat...	26	40	38	41	44	46	115
Milk and milk products in: terms of milk.....	172	240	238	252	260	274	114
Eggs (numbers).....	60	118	113	124	132	138	117
Fish and fish products...	7.0	9.9	12.2	12.6	12.9	13.2	133
Sugar.....	11.6	28.0	32.2	34.2	35.3	36.7	131
Vegetable oil.....	2.7	5.3	6.6	7.1	6.3	6.5	123
Potatoes.....	241	143	140	141	135	131	92
Vegetables and melons....	51	70	74	73	73	80	114
Grain products in terms of: flour or milled grain...	172	164	159	156	153	150	91

Source: Narodnoya khozyaystvo SSSR, 1965 and 1967.

A generally poorer diet structure prevails in rural than in urban areas of the Soviet Union, according to newly released data. The level of calories supplied by grains and potatoes is about 20 percent greater for the collective farmers than for other workers. Consumption of the typical collective farmer is below the national average of other foods, except eggs. A slight improvement in the collective farmers' relative consumption pattern has occurred since 1960.

Butter surpluses have emerged recently in the USSR. Butter production increased from 848,000 tons in 1960 to 1,177,000 tons in 1967 and approximated this level in 1968. Until 1965, production exceeded consumption by only a modest margin, which was disposed of by net exports averaging about 50,000 tons annually during 1961-65 with little change in stocks. Annual per capita consumption during this period increased from about 3.8 to 4.1 kilograms. In 1965 production exceeded consumption by more than 200,000 tons and a similar situation continued through 1967. Neither exports nor consumption increased appreciably between 1965 and 1967 and by January 1, 1968, wholesale and industrial butter stocks totaled about 530,000 tons.

Per capita vegetable oil consumption declined in 1966 and 1967, perhaps the result of an effort by the government to increase butter consumption. Strangely, the government has maintained the high retail price on butter of about 3.30 to 3.60 rubles per kilograms (about \$1.65 to \$1.80 per pound at the official exchange rate).

The butter glut is not so much a problem of surplus milk production as it is of an inadequate distribution system for fresh milk. During 1965-67,

between 60 and 65 percent of the milk purchased by the government was processed into butter and only about 14 percent was retailed as fresh milk.

Gradual improvement is being made, however, in the processing and handling of dairy products. The quantity of milk used in butter manufacture has remained relatively constant since 1965, but milk procurement by the government has climbed from 38.7 million tons in 1965 to 44.0 million tons in 1968. The additional 5.3 million tons have gone primarily into cheese, fresh milk, and dairy products other than butter.

INCREASINGLY COMPETITIVE EXPORT POSITION

Recovery from the poor grain harvests of 1963 and 1965 and the general improvement of agricultural output have contributed to a sharp increase in exports and a substantial decline in imports of agricultural commodities by the Soviet Union. In 1967, the value of exports of agricultural raw materials and processed foods was 42 percent above the value in 1965 and 23 percent above 1966. Agriculture's share of total exports increased from 14 percent in 1965 to 17 percent in 1967. Data are not yet available on 1968 exports, but the strong position of 1967 was probably maintained.

The value of imports of agricultural commodities declined 12.5 percent in 1967 from the value of 1966. The share of agriculture in total imports decreased from 25 percent in 1965 to 20 percent in 1967.

Trade with other Communist countries continued to dominate the trade pattern of the Soviet Union in 1967. About 66 percent of total exports went to these countries and about 70 percent of Soviet imports originated in them. Important shifts occurred, however. Exports to both the industrial west and the developing countries increased faster than to Communist countries. Imports from Communist countries increased, but imports from developing countries declined in 1967. The USSR trade accounts showed a positive trade balance with the industrial west for the first time since 1959.

The Soviet Union resumed its traditional role as a net grain exporter in 1967 (table 11). Total grain exports increased from 3.6 million tons in 1966 to 6.2 million tons in 1967. Imports (excluding rice and flour) declined from 7.7 to 2.2 million tons during the same period. A similar position was maintained in 1968.

Soviet grain trade is dominated by wheat. Wheat exports increased from 2.8 million tons in 1966 to 5.3 million tons in 1967, while imports declined from 7.6 to 1.8 million tons. The northern countries of Eastern Europe were the major recipients of Soviet wheat. East Germany, Czechoslovakia, and Poland each received about 1 million tons of Soviet wheat. But 1.0 million tons went to the UAR, Cuba and North Korea received 300,000 and 250,000 tons, respectively, and more than 600,000 tons were sold to other non-Communist countries. USSR wheat imports were primarily from Canada.

The level of Soviet wheat exports in 1968 apparently resembled that of 1967. Exports of at least 5 million tons are probable, with the northern

countries of Eastern Europe continuing to take quantities of about the magnitude of 1967. The USSR continued to offer wheat in the West European market. Imports declined as Canada failed to conclude contracts in 1968 for sale of the 4 million tons remaining to be purchased under the 3-year agreement that expires in July 1969.

The Soviet Union exported almost 1 million tons of other grains in 1967, up about one-fourth from 1966. About two-thirds of these exports consisted of feed grains--primarily barley--and one-third was rye. Most of these grain exports were directed into the northern countries of Eastern Europe, but some sales to Western Europe occurred. Feed peas, which were among the top 10 exports in 1966, dropped to a relatively low export level in 1967. The level of other grain exports probably increased slightly in 1968, as feed grain imports were boosted by Eastern Europe, particularly Hungary. Soviet rice imports were expanded by almost one-half to about 400,000 tons in 1967, despite substantial increases in domestic production. The jump in rice imports partly reflected increased trade with the UAR, which shipped 154,000 tons of rice in 1967 in comparison with 73,000 tons in 1966.

Cotton slipped to second in value among Soviet agricultural exports in 1967, but the quantity of cotton sold increased 5 percent to 534,000 tons (lint). Since imports declined 16 percent to 144,000 tons, the net export position was widened. About one-half of cotton imports came from the UAR with most of the remainder from other Middle Eastern countries. Eastern Europe received three-fifths of Soviet cotton exports. Japan increased purchases sharply from 31,000 tons in 1966 to 67,000 tons in 1967, and about this level was maintained in 1968. The failure to increase cotton production for the second consecutive year probably prevented any significant expansion in exports in 1968.

Exports of sunflower seed oil reached a new peak of 670,000 tons in 1967, surpassing 1966 exports by more than one-half. About 40 percent of these exports were shipped to Eastern Europe. Eastern and Western Europe typically have been the principal importing regions for sunflower seed oil. Starting in 1965, however, the flow into Western Europe began to accelerate in relationship to that into Eastern Europe. This developed into a considerable surge in West European imports in 1967. The leading West European importer of Soviet sunflower seed oil in 1967 was West Germany, followed by Austria and the Netherlands.

Exports of sunflower seed oil in 1968 probably held close to the 1967 level, but prices received in West European markets declined sharply. Countervailing duties by the Common Market were increased in 1968 on imports of Soviet sunflower seed oil. Soviet vegetable oil output increased by 5 percent to 3.2 million tons. Domestic consumption of vegetable oil is reported to have dropped sharply from the 1965 peak level, although there is some question about official consumption data.

Sunflower seed exports also increased sharply in 1967 to over 300,000 tons. Japan joined Eastern Europe as a major purchaser with USSR exports of 112,000 tons. Exports to Japan in 1968 continued, but at a reduced level.

Other major exports in 1967 were frozen meats, refined sugar, butter, wool, and oil cake and meal. Exports of meat showed the most substantial increase over 1966.

The principal Soviet agricultural import is raw sugar purchased exclusively from Cuba. Sugar imports expanded from 1.8 million tons in 1966 to 2.5 million tons in 1967. Other major imports, besides wheat, rice, and cotton, included wool, hides and skins, fresh fruit, tobacco, canned vegetables, and cacao beans.

The United States is the principal supplier of cattle hides to the Soviet Union. In 1967 hides were the principal U.S. export to the USSR, with the United States supplying 1.8 million hides against 1.2 million the year before; however, the aggregate value increased only 9 percent to \$16.8 million. Soviet imports of inedible tallow from the United States ceased in 1967. The major U.S. agricultural import from the USSR in 1967 (excluding furs) was about 6,000 tons of cottonseed oil--a new item on the list. Bristles retained second place, but imports of cotton linters dropped to third place.

In 1968, U.S. agricultural exports to the Soviet Union dropped to \$5.3 million from \$19.3 million a year earlier. Fewer than 400,000 cattle hides were exported. Imports declined to \$2.2 million compared with \$4.1 million in the previous year. Cotton linters regained first place in the list of imports.

OUTLOOK

The outlook for 1969 is for continued strong sales activity on world markets. The levels of production of grain and major industrial crops in 1968 suggest that large exportable supplies of wheat, cotton, sunflower seed oil, and refined sugar will continue to be available.

The Soviet wheat export position probably is the strongest among these commodities, although the large world wheat crop may prevent any major expansion of exports. The Soviet Union possesses sizable stocks from previous crops and the 1968 crop will increase this surplus. The bulk of USSR wheat exports probably will continue to go into the northern countries of Eastern Europe. With a more competitive situation in other markets, the USSR may find it advantageous to feed increasingly greater amounts of wheat to livestock. Considering the level of Soviet wheat stocks, a below-normal crop in 1969 probably would not cause the Soviet Union to reenter the market as a net importer of grain.

Slightly smaller quantities of Soviet vegetable oil probably will be offered on world markets in 1969. Oilseed production failed to increase significantly in 1968 and any increase in domestic consumption should reduce export availabilities. The recently released consumption data, discussed above, give rise to doubts that domestic consumption has moved substantially upward; therefore, the USSR is again expected to have large quantities available for export.

The failure of the cotton crop to increase since 1966 probably will cause a modest reduction in the quantities of cotton exported. The Soviet Union will, however, maintain a strong position in cotton markets.

The 1969 plan has called for gross agricultural output to increase by 6.1 percent to a value of almost 85 billion rubles. However, since 1968 results were better than early projections, an increase of only about 5 percent is needed to achieve the value target. Although the planned growth is higher than

growth rates obtained in either of the past 2 years, achievement is not out of the question. Moderately above-average weather would be necessary to meet the goal. Significant improvement in livestock productivity would have a major impact on the gross output index.

Substantial growth in output of livestock products is likely in 1969, given at least average weather. Farm reserves of grain, especially wheat, are at record levels. The record potato crop also will boost feed supplies. Early season setbacks in roughages in 1968 were overcome during the latter part of the growing season. With slightly fewer livestock on January 1, 1969, than a year earlier, improved feeding rates should occur. The reduction in hog numbers is not likely to continue. Trends in cow numbers are more difficult to predict in view of the glut of butter now held by the Soviet Government. However, barring severe drought, the private sector is not likely to reduce numbers as sharply in 1969 as in 1968. The 1969 plan provides for the release of more than 2 million tons of additional grain from state resources for feed purposes and the intent may be to improve performance of private holdings.

As demonstrated in 1968, grain output is swung most sharply by spring grain production, the results of which cannot be evaluated until well into the summer growing season. Although moisture reserves in the spring grain regions were replenished by good precipitation in the fall, snowfall was below normal during December and January in many areas. Winter grains were sown a little later, on the average, than in 1967, but generally favorable soil moisture conditions and a long, mild fall permitted these grains to enter the winter in relatively good condition. Apparently, strong winter winds in the North Caucasus and southeastern Ukraine blew off much of the snow cover. Exceptionally low temperatures and light snowfall during midwinter resulted in some reported damage to winter grains.

A total investment target for 1969 has not been announced, but state-centralized productive investment is planned to increase 18.6 percent. A considerably smaller rise in collective farm investment apparently has been projected and only modest increases are planned in deliveries to farms of most machinery and of mineral fertilizer. Attainment of 1969 output goals will depend more heavily on weather conditions and performance in the livestock sector than on any specific boost due to increases in capital investment during the year.

EASTERN EUROPE

EAST EUROPEAN ECONOMIC DEVELOPMENTS

Eastern Europe's socialist economies continued to show gains in 1968. National income increased by 5 percent or more throughout the area, but slowdowns in the rates of increase were experienced by all countries except Poland. Strong growth rates were again reported for the industrial sectors, but the agricultural and foreign trade sectors--particularly in the southern countries of Bulgaria, Hungary, Romania, and Yugoslavia--showed some weakness, compared with previous years.

Weather, particularly the long spring drought in the southern part of Eastern Europe, held back agricultural growth in the area. The higher tariff barriers imposed by the Common Market countries and the lingering effects of the devaluation of the British pound tempered foreign trade in 1968.

Czechoslovakia's position was unique among the countries of Eastern Europe in 1968. The "Action Program," with its emphasis and orientation toward free market disciplines, was politically strictured in mid-August, and the subsequent work slowdowns that emerged held expansion below earlier expectations. Hungary's "New Economic Mechanism"--a program geared to a broader use of economic means rather than to a continued use of planned directives--launched in the beginning of 1968 was carried out with moderate success. Most surprising to government planners was the modest influence that free market pricing had on the consumer price index. This success has encouraged the government to extend the range of food and consumer goods sold in the free market during 1969. In Yugoslavia the high unemployment rate at year's end and a shortage of capital for investments exposed an economic weakness that could carry over into 1969.

Bulgaria, Hungary, Poland, Romania, and Yugoslavia all showed some signs of a slowdown in agricultural trade with the hard currency countries of Western Europe in 1968. A further weakening of this East-West trade may evolve in 1969 if the existing high countervailing duties in Western Europe are continued.

AGRICULTURAL GOALS AND NET OUTPUT

After 5 successive years of sustained growth, agricultural production in Eastern Europe leveled off in 1968. The USDA index of net agricultural output showed no change for the area, but declines ranging from 5 to 18 points developed in the Danubian countries of Bulgaria, Romania, and Yugoslavia. All of these countries experienced a prolonged spring drought that extended through mid-May (table 1).

In contrast, Czechoslovakia and Poland showed gains in net agricultural output of 7 points. Better weather conditions and more intensive use of

material inputs contributed to this rise. The slight decline in East Germany follows the exceptional harvest of 1967, but suggests a plateau may have been reached.

While crop production was up for some countries and down for others, all countries showed an upturn in the livestock index. For the Danubian countries the increase in the value of output reflects the higher slaughter rate which offset declines in other livestock products. But in the northern areas the growth in the livestock sector reflects some improvement in feeding rates and feeding efficiency.

The per capita agricultural production index for the area declined 1 point in 1968. This downturn, the first in several years, should have little effect on food supplies for consumption or on imports, but the lower per capita production could affect the decisions to export foods and livestock products in the major exporting countries of Bulgaria, Hungary, Romania, and Yugoslavia.

Variable weather patterns, combined with shifts in acreage, strongly influenced the direction and volume of Eastern Europe's crop output in 1968. Drought, which occurs with predictable regularity in the southern countries of Bulgaria, Hungary, Romania, and Yugoslavia, developed in the spring of 1968 and posed a serious threat to crop production in these countries.

Below-normal rainfall and subsequent lowering of soil moisture reserves persisted through mid-May and adversely affected most fall and spring planted crops throughout Bulgaria, Romania, and in the major agricultural areas of Yugoslavia. Weather reports also indicated that the drought extended throughout most areas in Hungary, but, according to official data, crop damage there was considerably less than that experienced by adjacent countries in the drought zone.

In contrast to the dry weather patterns in the southern countries, good to excellent weather prevailed in Czechoslovakia, East Germany, and Poland. In all three countries crop production exceeded or equaled the high levels achieved in 1967.

Despite poor weather in major producing countries, total wheat production in Eastern Europe declined only 4 percent from the previous year's record of 25 million tons. (Area and production statistics for major crops by country can be found in tables 7 and 8 on pages 31 and 32.) Sharpest reverses--22 percent and 17 percent, respectively--developed in Bulgaria and Romania, both exporting countries. Yugoslav production declined 9 percent from the peak 1967 level. Surprisingly, Hungary reported an increase in wheat output, but part of this is attributed to a 7-percent increase in the planted area. The major importing countries of the area, Czechoslovakia and Poland, reported sizable gains in wheat output. Both posted new highs--Czechoslovakia, 3.1 million tons and Poland, 4.6 million tons. In line with programs to become less dependent on wheat imports, both countries also expanded the sown area of wheat in the past crop year. East Germany, the third major importer in the area, maintained the high level of wheat output achieved in 1967, but reported only a modest increase in the sown area.

Rye production for the area reached a new high in 1968--12 million tons. An increase in the planted area and the good weather in Czechoslovakia and Poland contributed to this increase. Poland's production alone accounts for 74 percent of the area's output. But for a number of years the rye area has been declining and, to a large extent, has been shifted to higher yielding wheat.

Feed grain production--barley, oats, corn, and miscellaneous grains--moved downward in Eastern Europe for the second successive year, suggesting that a renewed emphasis to expand acreage may develop in 1969. Total production of barley for the area amounted to 7.9 million tons in 1968, down 5 percent, and oat production, at 5.1 million tons, declined 3 percent from the 1967 level.

Corn, the major feed grain in Eastern Europe, declined 2 percent. Total output for the area was down about 500,000 tons from the 1967 level or 4 million tons below the record output of 22.6 million tons reached in 1966. The intensity and duration of the drought in the southern countries of Eastern Europe affected total output differently. Declines of 5 and 15 percent were reported for Yugoslavia and Bulgaria. Romania reported a modest decline, while Hungary reported a slight increase over the 1967 level. The small corn crop in the area, combined with the drop of oats and barley, has dampened the 1969 export potential of the major feed grain producers and exporters in the area--Romania and Yugoslavia.

Other major crop developments during the 1968 agricultural year were the downturns for sugarbeets, cotton, and tobacco, and increases for potatoes and oilseeds. The varying patterns of output reflect the influence of weather, policy, and planned shifts in acreage. Acreage declines occurred for cotton, potatoes, and sugarbeets. The sharpest cutbacks in sugarbeet acreage were noted in Czechoslovakia and Poland, which together produced 56 percent of the area's sugarbeets. The impact of this shift is noted by the 3 million-ton drop in production for the area in 1968 from the 1967 level, and could affect the trade pattern for raw sugar in 1969, particularly for Poland and Czechoslovakia.

Potato production increased modestly, rising to 78 million tons, but the strong position of oilseed production in a drought year was the most significant development of the year. While declining 10 percent in Bulgaria, sunflower seed production showed a sharp upturn in Yugoslavia with lesser but marked gains in Romania and Hungary. The latter country also reduced the planted area of sunflower seed, which makes the reported gains more notable. Total sunflower seed production reached 1.6 million tons, 2 percent above 1967. Rapeseed production in Poland increased 8 percent, and when combined with the good sunflower seed output in the southern countries, is the major reason for the high oilseeds output in 1968.

Bulgaria, Hungary, Romania, and Yugoslavia, major producers of fruits and vegetables in the area, all reported declines in output for 1968. Hay, forage, and miscellaneous grass crops were also smaller in 1968 because of the prolonged spring drought. The sharp decline in forage crops has been cited as a major reason for Hungary's planned increase in grain imports during the 1968/69 trade year.

Higher output of livestock products was the common achievement of all East European countries in 1968. The total increase in meat production for the area

amounted to 3.0 percent; milk output climbed 3.8 percent, and butter gained 1.7 percent over 1967 levels. Country performances varied considerably and the changes in the production of these commodities reflect a response to adverse weather in Bulgaria, Hungary, and Romania, to domestic policy directives in Poland, East Germany, and Czechoslovakia, and to external influences in Yugoslavia.

Beef and veal, for example, increased most rapidly in Hungary and Poland, 8.6 percent and 8.4 percent, respectively, and the least in Yugoslavia. (Livestock numbers and product statistics by country appear in tables 9 and 10 on pages 33 and 34.) The strong gains in Poland can be attributed to long-term policy aims to use roughage reserves more efficiently and in Hungary to the heavy slaughter of livestock on household plots. The Yugoslav position reflects, to some degree, a move to export live animals as a means to circumvent the higher import duties placed on beef imports by the Common Market countries.

Gains in pork production developed in all countries except Poland, where a decline of 2.5 percent followed the heavier slaughterings in middle and late 1967. Government attempts to maintain the retail price of pork, along with the higher cost of feed, influenced Polish peasants to slaughter hogs for personal consumption rather than for commercial use. A less than satisfactory level of feed supplies in 1968 compared with 1967 also accelerated the slaughter of hogs in Bulgaria, Romania, and Yugoslavia, and partially accounts for the gains in pork made last year.

Increased poultry production for most countries in 1968 can be tied to farm policy directives that have encouraged the expansion of commercial poultry operations. Currently, commercial enterprises produce 40 percent of total output in Czechoslovakia and Bulgaria. In East Germany, 33 percent of total poultry production is produced by commercial enterprises, but in Hungary, Yugoslavia, and Poland large-scale processing plants contribute only 10 percent or less of total production.

Milk declines occurred in Hungary and Bulgaria, both of which experienced poor pasture conditions because of the spring drought. Similarly, the prolonged siege of dry weather affected the output of wool in Romania and prevented gains in Yugoslavia and Hungary.

January 1968 census data also showed gains for the area for all categories of livestock compared with 1967, except for horses. But country data show lower cattle numbers for Bulgaria, lower cow numbers in Czechoslovakia and East Germany, and a rather sizable drop in hog numbers for Poland. A decline in sheep numbers was also reported for Bulgaria and East Germany. Horse numbers continued the downward trend in all countries except Poland, where small peasant holdings require horses for draft power. Conversely, Poland is the only country that showed a decline in poultry numbers.

While these gains in livestock numbers or high level of output of most livestock products throughout the area lend some optimism for continued growth into 1969, the reported heavy slaughter of livestock in some countries reduced January 1 livestock holdings in 1969 from the levels of 1968. This suggests a slowdown or decline, particularly in meat production, could develop.

Early census estimates for 1969 indicate downturns in total livestock holdings in all countries. The drought and feed shortages which accelerated early slaughter of livestock, including the number of breeding sows, are factors accounting for this change in Bulgaria, Hungary, Romania, and Yugoslavia. In Poland and Yugoslavia, where private farming still predominates, the high prices of feed may have influenced peasants to cut back numbers.

FARM INPUTS AND POLICY CHANGES

Eastern Europe's agriculture was critically tested by the spring drought in 1968. The ability to contain losses under adverse weather conditions stands out as one of the important agricultural highlights of the year. Without the long-term improvements in technology, structural changes in farm enterprises, new emphasis on research, and the continued growth in capital investments, the countries affected by the drought--Bulgaria, Hungary, Romania, and Yugoslavia--probably could not have achieved the successes subsequently reported. The same type of programs have pushed the agricultural sectors ahead in Poland and Czechoslovakia since 1965 and served as a strong impetus for steady agricultural gains in East Germany since 1963. Policy recommendations for 1969 suggest a continuation of this trend through 1970.

Higher inputs of fertilizer were again reported for all countries. East Germany, currently the highest user (275 kilograms of plant nutrients per hectare of arable land), is slowly giving ground to Czechoslovakia, which reported application rates of 186 kilograms in 1968. Romania and Yugoslavia are still using less than 100 kilograms per hectare, but Hungary moved out of this lower range in 1968. Poland and Bulgaria are now applying 100 to 130 kilograms per hectare (table 12).

Inventories of farm machinery continued to show gains in all countries and the declining ratio of agricultural land per 15-h.p. tractor unit reflects this long-term trend. In 1967 the East European average was 54 hectares per 15-h.p. unit, with the lowest ratio--28 hectares per 15-h.p. tractor unit--reported for East Germany and Czechoslovakia (table 12). The highest ratio ranged from 59 to 67 hectares per tractor unit for Bulgaria, Yugoslavia, and Romania.

New irrigation areas were developed in Bulgaria, Romania, Czechoslovakia, and Hungary. The 24,000-hectare increase reported by Bulgaria raised the total irrigated area to about 1.2 million hectares. Romania's irrigated area reached 530,000 hectares by yearend 1968, and plans call for an additional 100,000-hectare increase for 1969. Both countries have maintained that the expanded irrigation facilities helped to hold farm losses down during the drought.

To a greater extent than in previous years, the economic and management programs introduced in 1968 placed a stronger emphasis on the achievement of viable farm enterprises than on organizational changes. In Poland, the government intensified efforts to maximize all useable agricultural land. Less and less choice is given to peasants. Early in 1968 the government enacted legislation permitting state takeover of land that is considered underutilized. This is probably the first of stronger measures to come.

Czechoslovakia and Hungary both advanced the collective farm managers' position in 1968 by expanding the free market sale opportunities for a select group of commodities. This market-oriented policy decision is a beginning effort to introduce some element of market demand into the planning programs of farm enterprises. The current free list of commodities is still small but there is evidence to suggest that the list will be expanded in 1969.

Romania is still experimenting with policy changes on procurements, prices, wages, and social benefits. But in late 1968 the government proposed a review of the existing agricultural tax laws. A new tax law calls for a shift from the current land value tax base to one based on farm income. According to government planners the higher incomes of some state farms, collective farms, and household plots result from larger free market sales at higher prices of intensively produced products. This has given an income advantage to these farms and households and has placed others at a disadvantage. In effect, the shift may increase the total tax revenue of the government for investment support to non-viable farms, but it could also prove to be a disincentive to the production of high value products.

In Bulgaria some resurgence of organizational programs appeared in 1968. Proposed changes follow the pattern of the agricultural-industrial complex already established in East Germany and, to a lesser extent, in Czechoslovakia and Hungary. These schemes are designed to ensure the maximum use of surplus agricultural labor, to increase the procurement of agricultural products, and to maximize the utilization of processing facilities.

East Germany in 1968 moved ahead on its planned integration of the agricultural and food industry sectors. A single plan for these two sectors was also issued for the first time in 1969. The high degree of organization and industrial technology in the food processing industry in East Germany has allowed this country to accelerate the integration of the agricultural and food processing sectors.

Again setting the pace toward the adoption of more market-oriented agricultural programs in Eastern Europe, Yugoslavia in 1968 started a review of its existing agricultural pricing policy. This review, which reflects an awareness of the changing market conditions in the world, is the first effort to extend the system of guaranteed prices of corn and wheat to the individual peasant. The government also continued its subsidy program to the fertilizer industry and to the market organizations that sell fertilizer to the state, cooperatives, and participating members of farm cooperatives.

FOOD CONSUMPTION AND SALES OF FOOD AND NONFOOD PRODUCTS

While continued emphasis has been given to increasing agricultural production in all East European countries, there have been similar successful programs, but less rapid gains, made in the sales of food products. Consumption patterns not only have changed because of these programs, but there has also been an increase in the consumption of processed foods in the rural areas.

According to preliminary estimates for 1968, food consumption in Czechoslovakia increased by 7 percent compared with 1967. This estimate included all

types of basic as well as luxury foods. In East Germany, the 4.9-percent increase in cash incomes over 1967 was reflected in a corresponding increase in total retail trade turnover. Current estimates indicate that 37 percent of net family income is spent for food in East Germany, the lowest percentage in the East European area. Romanian reports indicated that total money incomes increased approximately 8 percent for both rural and urban families in 1968. Poland reported an increase in the consumption of most foods in 1968 compared with 1967. Announced increases included a 5.9-percent gain for butter, a 9.3-percent gain for fish and fish products, a 5.6-percent gain for sugar, and a 2.9-percent gain for eggs. The demand for all major food items was met except for meat. The Yugoslav food supply situation showed some signs of weakening in 1968, particularly for meat and milk, both of which are already low on the per capita scale compared with other countries in the area. Bulgaria announced an increase of 8 percent in retail turnover. The per capita consumption of meat, dairy products, potatoes, rice, sugar, and eggs was reported to have increased over 1967.

THE SHIFTING PATTERN OF AGRICULTURAL TRADE

Eastern Europe, while a net importer of agricultural products in past years, has placed a high premium on exports of agricultural products in recent years. Current evidence also suggests that the role of agricultural trade as a major supplier of hard currency will remain strong in the immediate future. This is particularly true for the low-income Danubian countries and for Poland.

Estimates of the total value of trade for 1967 show imports of \$3 billion and exports of \$2.6 billion. Major importers were the high-income countries of Czechoslovakia and East Germany--averaging \$750 million each--with Poland running close behind at \$600 million. Hungary and Yugoslavia have also been sizable importers in past years, but the value of imports has decreased following the good harvests of 1966 and 1967.

The value of exports range from \$400 million to \$600 million in Bulgaria, Poland, and Romania. Hungary and Yugoslavia are also close to the \$400 million level.

The largest share of Eastern Europe's agricultural imports is supplied by the Soviet Union, but an increasingly larger share of Eastern Europe's exports are moving to hard currency countries and, in particular, to the Common Market countries.

Total grain imports for the area in 1967 amounted to 6.3 million tons and total exports, 4.3 million tons. Compared with 1966, net grain imports declined 4 million tons. Romania's grain exports of 2.3 million tons in 1967, combined with Yugoslavia's exports of approximately 800,000 tons, accounted for 72 percent of total East European grain exports. Estimates for 1968 indicate that a sizable drop in grain exports developed and that total exports for the year may have been closer to the 2 million tons reported for 1963.

Grain imports for 1968 are currently estimated to be about the same as the 6.3 million tons reported for 1967 but a smaller proportion will be purchased

from Western countries. Smaller imports by Yugoslavia in 1968 countered increases by other countries in the area. The good grain harvests in 1968 in the major importing countries of Czechoslovakia, East Germany, and Poland, moreover, suggest that the probable imports for 1969 will not change much from those currently estimated for 1968.

Exports of agricultural commodities to Western Europe continue to be pushed despite the impediments placed on this trade. The \$94 million value of meat and meat product exports in 1967 by Poland, Yugoslavia, Hungary, and Romania, and the \$42 million value of oilseeds and vegetable oil from Romania and Bulgaria to Western Europe reflect this policy and show the emphasis these countries are giving to earning hard currency. Higher countervailing duties imposed by the EC in 1968 on both products caused a sharp cutback in the value of this trade and adversely affected the major exporting countries of Yugoslavia, Poland, and Hungary.

U.S. agricultural exports to Eastern Europe declined in 1967 to \$144 million--down 38 percent from the 1966 level. Current indications are that a further decline may have developed in 1968. The drop in 1968 is attributed to the lower volume of grain exports to Yugoslavia and Poland without any sizable increase in exports of other products to either of these countries or to other countries in the area.

OUTLOOK

Preliminary agricultural goals for 1969 indicate that continued strong investment support will be given to agriculture in 1969 to carry forward programs under the current 1966-70 plans. Planned rates of growth for 1969 range from 16.6 percent for Bulgaria to 2 percent for Czechoslovakia and Poland. Bulgaria's sharp increase, which reflects the impact of the 1968 drought, does not signal a major breakthrough in output.

Commodity plans give no indication of any shifts in priority because of the 1968 drought. Winter wheat acreage, for example, is tentatively estimated to be only slightly higher for the area than that planted in the fall of 1967. There is no evidence of planned increases for Bulgaria, Hungary, Romania, or Yugoslavia, but an increase in the sown acreage may develop in Czechoslovakia and Poland.

Fall precipitation was below normal in Bulgaria, Hungary, Romania, and Yugoslavia, but normal in the northern areas. A colder winter with moderate snow cover was reported in the southern countries of the area.

The outlook for U.S. trade in Eastern Europe has been dimmed somewhat by the strong return of the Soviet Union into the markets of Eastern Europe, particularly for grains. The growing strength of self-sufficiency and the shortage of hard currency in the East European countries further reduces the grain trade opportunities for 1969.

MAINLAND CHINA

China's economy continued the stagnation evident in 1967, but after the first half of 1968 gained momentum and ended the year with modest gains. Industrial production reportedly equaled or exceeded that of 1967 but did not attain the 1966 record level. Even agriculture finished the year on a higher level of production than expected, following the poor summer harvests.

The Cultural Revolution continued to dominate the Chinese economy through mid-1968, but restraining forces developed after midyear and, with army backing, suppressed the previously uncontrolled disruption of economic activity that had characterized the Cultural Revolution since 1966. The poor and middle class peasants and workers, rather than the Red Guards, became the main force of the Cultural Revolution. Order of a type has been imposed; under army protection and guidance worker-propaganda teams have been organized to carry out Mao's thought.

In October, a plenum of the Communist Party was convened to draw up a new constitution and to set a date for the Ninth Party Congress--the first in 13 years. In the final months of 1968, the major nonagricultural sectors--industrial production, internal and foreign trade, and construction--reportedly were gaining momentum despite undercurrents of dissatisfaction and overtones of another "Leap Forward" in production.

AGRICULTURAL PRODUCTION

Agriculture in 1968 in Mainland China, although showing more resiliency during the second half of the year, was unable to maintain the 1967 level of performance. Weather, an especially important variable in crop production in China because of limited investment and inputs, was less favorable than the previous year. Agricultural inputs also were down, particularly mineral fertilizer, despite increased imports.

Although official claims of increased production of food and commercial crops by some provinces appear justified, total crop production in Mainland China in 1968 was lower than 1967's good performance. Provinces which claimed increased production are not major agricultural areas and have little influence on the national level. No discernible shifts were made in crop acreage, though planting and harvesting were delayed in parts of South, Central, North, and East China due to unusual weather conditions. The first half of the crop year was abnormally dry in the North and abnormally wet in the South.

Production of food grains (the Chinese include potatoes at one-fourth grain value in their food grain statistics) is estimated to have declined from the good harvest in 1967 but to have been slightly larger than in 1966. This reduction was due primarily to the poor harvest of early rice and winter grains.

On essentially the same area as in 1967, winter grain failed to sustain 1967 yields. Fall growing conditions for winter wheat were no better than the previous year. The late spring and below-normal precipitation reduced winter wheat yields in Central and North China and late frosts damaged or killed large areas of the crop. Planting of spring wheat also was delayed because of dry weather. Except for the wheat crop in 1967 and the good crop in 1964, wheat production has remained below the level of the late 1950's.

Output of other winter crops (barley, rapeseed, beans, and peas grown in the Yangtze Valley, and sweet potatoes in Kwangtung Province), is estimated to be lower than in 1967. Torrential rains in May and the shifting of some areas to grass crops strongly influenced these declines.

Early rice, also harvested in midsummer, was similarly affected by the weather, reducing output an estimated 10 to 15 percent. Cold, wet weather at transplanting time caused some seedling rot, requiring additional transplantings. The long period of cloudy, rainy weather in May delayed maturation of the crop in many areas of Kwangtung Province. Additionally, heavy rains in June and July in South, Central, and East China caused flooding of low-lying rice fields in parts of Kwangtung, Kiangsi, and southern Fukien provinces, the main early rice areas. The total effect of weather on the early rice crop, which constitutes over one-fourth of total rice production, may have been as great as in 1966 when floods devastated much of the Pearl River Delta.

Weather conditions were more favorable during the last half of the crop year (August-December). Exceptions were the continued below-normal precipitation in Northeast and Northwest China. Fall harvested crops (about two-thirds of cereal crops and essentially all the industrial crops--oilseeds, fibers, and tobacco) thus fared better than the early summer crops except miscellaneous grains in some areas of North China.

The output of intermediate rice, the major rice crop, and of late rice was only slightly less than in 1967, but other major food crops, miscellaneous grains (including pulses), and potatoes declined in 1968. The summer miscellaneous grains--corn, kaoliang (sorghum), oats, millet, and buckwheat--were affected by dry weather during most of the growing season. Miscellaneous grains grown in the winter, including barley and most pulses, did better.

Production of industrial crops was lower in 1968, but only by a small margin. Cotton, the major industrial crop, suffered from the effects of weather at planting, but favorable weather at harvesttime improved the quality in comparison with 1967. The output of bast fibers--tobacco, tea, silk cocoons, and fruit--appears to have declined. Oilseed crops, especially soybeans, were also lower than in 1967. The drier than usual weather in Northeast (Manchuria) China affected both acreage and yields of soybeans, the main oilseed crop. Peanut production also declined, but rapeseed (primarily winter-grown) was only slightly less than in 1967. If the typical Chinese description of crop production remains true to form, the absence of official statements on sugarbeets and sugarcane indicates that they did not match the level of the good crops in 1967.

The most meaningful information about livestock in Mainland China in 1968 was an official statement in September that, at the end of 1967, the number of horses, mules, donkeys, cattle, sheep, and hogs reached or surpassed the record level of the 1950's. Sheep and goats, which were least affected by the events a decade ago, are estimated to be higher than the 1957 record, and hog numbers in 1968 may have reached that level. If cattle and horses, especially draft animals, regained pre-Leap Forward levels, this would represent a substantial advancement in China's livestock industry.

Information on livestock production during 1968 is sketchy. Severe winter storms in range areas apparently reduced the lambing and calving rates. Feed supplies, including concentrates, are estimated to have been less than in 1967. Reported shortages of livestock products in various areas at various times indicate problems with domestic supply. Exports of hogs to Hong Kong, and exports of meat and meat products declined in 1967 but appear to have stabilized in 1968.

AGRICULTURAL POLICY

There were no major policy changes and few adjustments which significantly affected agriculture in Mainland China during 1968. However, additional restrictions were placed on private plots, other sideline production activities, and the so-called free market. Furthermore, increased authority of production brigades at the expense of the smaller production teams suggests that tighter controls were being placed on agriculture at yearend.

Programs affecting agricultural output during 1968 included an increase in mineral fertilizer imports to bolster domestic production, increased efforts to return students and city dwellers to the countryside, continued supervision of farming activities by army units throughout cropping areas, and a stepped-up campaign to institute the so-called Tachi system, by which rewards are based on some measure of equating distribution rather than on one's contribution to production. The first two may have contributed to production, but the last two were obviously motivated by a desire to control distribution.

Guidelines for local unit autonomy and self-sufficiency were modified little during the year. Lags were reported in procuring food and technical crops in both 1967 and 1968. The main emphasis on mechanization was placed on increasing the production of conventional farm tools, small agricultural machines, animal-drawn machines, and hand tools. Production of farm machines and tools appears to have been further diversified and continued emphasis was placed on local production and acquisition of implements. Investments of state funds in irrigation and water projects do not appear to have increased.

Hints of further policy changes were enumerated in "The Struggle Between the Two Roads," printed in the three major official party publications on November 23, 1967. This document, besides outlining general guidelines for educating the peasants and cadre to Mao's thought, implied the eventual dissolution of private plots and sideline production and the elimination of all vestiges of

non-Communist forms of production through a long-term program of education. Changes in the countryside during the second half of 1968 suggest that these programs may accelerate.

Significant developments in 1968 included social programs encompassing social units far larger than the production teams of the post-Leap Forward period--more on the magnitude of the former production brigades and even the communes of 1958-59. These programs included the organization of rural social units with the responsibility for operating schools, medical centers, industries, and commerce, and possibly the management of tractors and other large agricultural machinery. The earlier communes did not have all these responsibilities.

The impetus for these activities in the countryside may have been the Central Committee's "Directive Concerning the Great Proletarian Cultural Revolution in Rural Areas in the Coming Winter and Spring," issued July 27, 1968, at a provincial planning conference in Hunan Province, and subsequently spelled out in greater detail at Party conclaves including the Central Committee Plenum in October. In general, four broad areas of activities, which surpass local significance, were emerging at yearend: mergers of rural units (production teams and brigades); changes in commerce and industry in rural areas; directions for reforms in rural education and health programs; and massive migration of urban youths, cadres, and jobless to rural areas. The rationale behind many of these activities and directives is reminiscent of that which preceded the formation of advanced collectives in 1955-56 and the communes in 1958. The new rural medical program, an innovation of the Cultural Revolution, can be administered only through the structure of the brigades and larger units (communes).

These changes, together with the recent move to require management of rural Supply and Marketing Service Centers by peasant managerial teams, indicate the reemergence of local autonomy--under Party guidance--which parallels decentralization during the Great Leap Forward. Although neither a Great Leap Forward nor the return to the communes could be identified at year's end, movement in that direction remains a possibility.

CONSUMPTION

Consumption of food and other necessities in Mainland China is strictly regulated by the government. During the Cultural Revolution in 1967 and 1968 these controls were less effective because of the breakdown in procurement and distribution systems. The good harvest in 1967 lessened the effect of some of the disruptions. Although no food crisis developed, shortages occurred in many areas and at unusual times despite the large increase in grain production over the previous year. Thus, in a year when stocks could have been replenished, much of the increase remained in the possession of peasants, and many products, including grains, appeared on the black market.

During the winter of 1967/68 grain shortages occurred in certain traditional deficit areas and in some areas affected by drought. There were complaints of the inclusion of a higher percentage of coarse grains in the basic grain ration in major northern cities. Cooking oil continued to be rationed and

was unavailable at times. Pork was rationed in many areas of southeastern China. Such rationing may have occurred, in part, to continue exports of live hogs to Hong Kong. Many household items--products of light industry whose raw materials originate on farms--were added to the growing list of rationed items.

Based on the fragmentary information available, despite these shortages, consumption during the 1967/68 consumption year was probably little changed from the previous year. Consumption during 1968/69 is expected to decline somewhat, but without serious consequences.

FOREIGN TRADE

After a 5-year uptrend Chinese exports and imports declined in 1967, began to level off in the first half of 1968, and moved upward during the second half of the year. This upswing was not sufficient to prevent a net decline in both exports and imports for the second straight year. A better balance was achieved because imports from the Free World declined more than exports. The only noticeable increase in imports was mineral fertilizers, which may have reached almost 7 million tons.

Trade with the Free World accounted for about 79 percent of the total value compared with 25 percent in 1959, when China's trade was oriented to the Communist Bloc, especially the USSR. Total trade turnover with Japan, China's foremost trading partner in recent years, continued to decline in 1968 despite record Japanese exports to China. New negotiations are necessary for further trade since the 1-year agreement under the new Memorandum-Trade Agreement expired December 31, 1968. Exports to Hong Kong, China's best source of foreign exchange, improved substantially in the last half of 1968, coming close to the 1967 level but still substantially below 1966. Trade with West European countries, both exports and imports, also was down, particularly with the United Kingdom, West Germany, and Italy. Less variation in trade occurred with African and Latin American countries according to preliminary and incomplete trade data.

China's trade with the USSR peaked in 1959 at just over \$2 billion. Trade between the two countries dropped sharply after that. Between 1962 and 1966 Chinese imports from the USSR leveled off and ranged between \$135 and \$233 million, while its exports to the USSR continued to drop steadily from over \$500 million in 1962 to \$143 million in 1966. In 1967 exports and imports dropped sharply to about \$50 million each. Thus, China's trade with the USSR, which was almost half its total trade in 1959, accounted for only 6 percent in 1967, and this trend continued in 1968. Trade with the Communist countries in Eastern Europe also declined in 1967, and probably fell further in 1968.

Shifts in the commodity composition of China's trade occurred in 1967 and 1968. Foods, the major import since 1960, were replaced by manufactures (including steel and steel scrap) in 1967. However, in 1968 imports of foods may have regained the leading position since imports of non-foods in 1967 were abnormally high and were trimmed substantially last year. Exports of food retained their leading position in 1967; trade patterns in 1968 indicate a similar trend. The total value of agricultural trade declined in 1967; a continuing drop appears likely in 1968. Imports fell the most because of reduced purchases

of wheat and cotton in 1967. Although purchases of wheat in 1968 were reported-ly smaller, imports exceeded those of 1967. Imports of cotton, which fluctuate widely, may be no larger in 1968 than in 1967. Exports of oilseeds increased slightly in 1967. Exports of soybeans, the most important oilseed export, were slightly below the 4-year average (1964-67) of 550,000 metric tons in 1967 and may have declined further in 1968. Soybean exports for the year to Japan, the major market, totaled 417,000 tons, an increase of 7 percent compared with the previous 2 years.

Table 6.--Mainland China: Trade of selected major commodities, 1961-68

Year	Imports			Exports	
	Total grain	Wheat <u>1/</u>	Cotton (raw)	Rice	Soybeans
	<u>1,000 tons</u>				
1961.....	4,444.8	3,073.3	58.3	445.9	335.4
1962.....	5,999.3	4,698.9	67.5	573.2	342.2
1963.....	4,557.3	4,394.9	143.1	627.6	322.1
1964.....	<u>2/</u> 6,795.6	<u>2/</u> 5,610.6	105.2	782.8	498.2
1965.....	5,520.5	5,270.9	168.5	<u>3/</u> 740.0	576.2
1966.....	6,446.9	6,375.2	106.6	1,197.0	550.1
1967.....	4,261.2	<u>4/</u>	87.5	1,050.0	545.0
1968 preliminary....	4,444.3	<u>4/</u>	<u>5/</u>	<u>6/</u>	550.0

1/ Includes wheat equivalent of wheat flour.

2/ Does not include 450,000 tons of wheat transshipped from Mexico.

3/ Reported data only.

4/ Available information indicates only wheat was imported.

5/ Available data indicate a drop in imports in 1968.

6/ Incomplete information suggests exports equaled those in 1967.

Despite declines in 1967 and 1968, China's exports of three major categories of food (cereals; livestock and products; and fruits and vegetables) have increased markedly since 1962. Together with soybeans and other oilseeds, they comprise 60 percent of the country's farm exports. The combined value of these exports fell short of paying for wheat imports through 1965. But since then their revenue has far exceeded the cost of wheat imports. Part of this is due to decreased wheat imports, but the potential earning power of these commodities has considerable promise. Two of these categories of exports (livestock and products; and fruits and vegetables), which have accounted for half the total value of farm exports, are produced primarily in the private sector with 5 percent of the cultivated land.

Rice was the major food export in 1968. From a low of about 400,000 tons in 1961, exports of rice rose to slightly more than a million tons in 1967. Incomplete data suggest about the same level of exports in 1968. Exports to Japan dropped from 300,000 tons in 1966 to about 200,000 tons in 1967 to slightly over 100,000 tons in 1968. Shipments to Ceylon, Singapore, Malaysia,

and Cuba (each of which takes 100,000 to 200,000 tons) remained at about the same level as in 1967. Exports to Hong Kong were up slightly and there are indications that exports to the Middle East, Africa, Latin America, and Western Europe may have increased somewhat in 1968. Exports to North Vietnam probably increased. These increases appear sufficient to offset the drop in exports to Japan and Pakistan.

Imports of wheat, China's main food import, increased to 4.4 million tons in 1968 against 4.2 million tons in 1967. Australia, Canada, and France were the major suppliers. China purchased 1.59 million tons of wheat from Canada in mid-November 1968 for delivery through July 1969. This increases total purchases from Canada under the 3-year agreement, August 1966-July 1969, to 6.4 million tons, or 87 percent of the high option of the 4.6 to 7.6 million-ton agreement. China's 2.2 million-ton purchase of wheat in January 1969 from Australia, a record single grain transaction for both countries, is to be delivered by March 1970. Under this agreement China has the option to take full delivery in 1969.

OUTLOOK

The noticeable rise in the general level of economic activity which began to emerge late in 1968 is expected to continue in 1969--and possibly accelerate. Industrial production is expected to expand, and foreign trade should continue the upward trend noted during the last half of 1968. Agriculture is expected to continue to receive attention, especially grain production, and greater support for agriculture is expected from other sectors of the economy. Both the direction and the degree of acceleration should become more apparent following the Party Congress scheduled for 1969.

Under the assumption that no radical changes will occur in agricultural policy, agricultural production should increase in 1969 if near-normal weather prevails. Many of the disruptive factors which deterred farm production during the past 2 years have lessened. Communications and transportation appear to be at or near normal operating levels. This should insure better and more timely delivery of inputs, particularly mineral fertilizer, for the agricultural sector. Administration, though strongly militarily oriented, can put new directives into effect and require compliance with production programs in farming areas. However, the full effect of the substantial social changes in 1968 is not yet clear and additional disrupting changes may develop which could further impede agricultural progress.

Although there is no indication of the level of investment for agriculture, projects heavily weighted with labor and local capital designed to assist agricultural production (water conservation, machine repair, manufacture of farm tools, and irrigation projects) should be more effective than during 1967 and 1968. These activities indicate an increase in the level of production goals. In fact, scattered recent official pronouncements indicate a possible push to fulfill the goals of the Third Five-Year Plan (1966-1970) a year ahead of schedule.

Crop production in 1969, barring unfavorable weather, should exceed that in 1968. Off-season activities allied with crop husbandry appear to be better

organized and work on them somewhat more advanced than previously. Acreage of winter wheat and rapeseed for harvest in 1969 may have been expanded. Slightly better weather at planting appears to have given more promise to the winter wheat crop.

Purchases concluded for delivery of wheat in 1969 indicate that wheat imports this year may exceed those in 1968. Current negotiations with France may result in imports at least equal to the 600,000 tons delivered in 1968. Also some uncommitted wheat still remains in the long-term Sino-Canadian wheat agreement which expires in August 1969.

Smaller exports of peanuts, soybeans, and rice in 1969 may result from reduced 1968 output of these commodities.

Table 7.--Eastern Europe and Soviet Union: Area of selected crops, average 1960-64, annual 1965-68 1/

[illegible]

1/ 1968 data are preliminary. 2/ The difference between total and individual grains is other grains, which include buckwheat, millet, spelt, mixed grains, and rice. 3/ Includes pulses. 4/ Tobacco and makhorka. 5/ The 1968 East German yearbook does not provide 1967 and 1968 tobacco data. 6/ Sunflower seed is the major oilseed in Bulgaria, Hungary, Romania, Yugoslavia, and the USSR, while rapeseed is the major oilseed in Czechoslovakia, East Germany, and Poland.

Table 10.--Eastern Europe and Soviet Union: Production of principal livestock products, average 1960-64, annual 1965-68 1/

Commodity and year	Bulgaria	Czechoslovakia	East Germany	Hungary	Poland	Romania	Yugoslavia	Total Eastern Europe	USSR	Total Eastern Europe and USSR
	<u>1,000 tons</u>									
Beef and veal										
1960-64 average...	60	209	222	138	395	198	179	1,401	2,856	4,257
1965.....	78	230	244	140	434	210	183	1,519	3,315	4,834
1966.....	91	251	276	152	440	225	216	1,651	3,740	5,391
1967.....	91	268	298	162	498	235	239	1,791	4,335	6,126
1968.....	94	268	310	176	540	250	256	1,894	4,420	6,314
Mutton, lamb, goat-meat										
1960-64 average...	55	---	---	12	24	68	49	208	848	1,056
1965.....	74	---	---	13	20	70	44	221	800	1,021
1966.....	84	---	---	15	20	70	46	235	720	955
1967.....	84	---	---	15	22	75	50	246	800	1,046
1968.....	87	---	---	18	20	78	50	253	800	1,053
Pork										
1960-64 average...	139	372	657	281	1,200	296	273	3,218	2,715	5,933
1965.....	188	442	798	320	1,306	337	395	3,786	3,075	6,861
1966.....	181	415	818	314	1,345	374	287	3,734	3,375	7,109
1967.....	181	420	842	307	1,313	420	309	3,792	3,375	7,167
1968.....	188	424	876	328	1,280	435	320	3,850	3,375	7,225
Poultry meat										
1960-64 average...	37	49	59	124	72	71	68	480	760	1,240
1965.....	44	53	64	144	89	85	80	559	700	1,259
1966.....	48	58	65	150	103	93	88	605	700	1,305
1967.....	48	68	69	164	107	97	95	660	800	1,460
1968.....	50	81	76	166	110	100	90	687	800	1,487
Total meat										
1960-64 average...	295	630	969	569	1,854	633	616	5,566	7,433	12,999
1965.....	385	725	1,131	622	2,015	702	757	6,337	8,128	14,465
1966.....	407	724	1,183	634	2,086	762	686	6,482	8,725	15,207
1967.....	407	756	1,230	652	2,130	827	751	6,753	9,417	16,170
1968.....	422	773	1,284	692	2,146	863	775	6,955	9,488	16,443
Milk										
1960-64 average...	1,181	2/3,748	2/5,615	2/1,865	2/12,701	2,693	2,424	30,227	56,414	86,641
1965.....	1,388	2/3,924	2/6,371	2/1,762	2/13,314	2,684	2,474	31,947	65,307	97,254
1966.....	1,501	2/4,169	2/6,788	2/1,845	2/14,235	3,092	2,696	34,326	68,393	102,719
1967.....	1,610	2/4,335	2/6,904	2/1,977	2/14,494	3,347	2,801	35,468	71,928	107,396
1968.....	1,565	2/4,559	2/6,940	2/1,964	2/14,900	3,765	2,900	36,593	73,900	110,493
Wool 3/										
1960-64 average...	23	n.a.	8	9	8	23	13	84	362	446
1965.....	26	n.a.	8	10	8	25	13	90	357	447
1966.....	26	2.2	8	10	8	26	13	94	371	465
1967.....	27	2.6	8	10	9	28	14	99	394	493
1968.....	29	2.7	8	10	9	26	14	99	413	512
Butter (factory production)										
1960-64 average...	11	69	4/171	17	90	15	n.a.	372	794	1,167
1965.....	12	84	4/197	17	105	22	n.a.	437	1,072	1,509
1966.....	12	84	4/206	19	118	28	n.a.	467	1,042	1,509
1967.....	14	86	4/209	23	119	30	n.a.	481	1,060	1,542
1968.....	12	88	4/219	21	121	28	n.a.	489	1,080	1,569
	<u>Millions</u>									
Eggs										
1960-64 average...	1,302	2,441	3,432	1,937	5,915	2,447	1,558	19,032	28,415	47,447
1965.....	1,449	3,007	3,935	2,393	6,264	2,630	1,746	21,424	29,068	50,492
1966.....	1,490	3,080	3,894	2,436	6,253	2,814	1,996	21,963	31,672	53,635
1967.....	1,683	3,110	3,995	2,750	6,348	2,900	2,126	22,912	33,921	56,833
1968.....	1,600	3,017	3,975	2,800	6,415	3,033	2,250	23,090	35,500	58,599

^{1/} 1968 data are preliminary and meat production data are in terms of carcass weight (excluding fats and offals except for Romania).

2/ Cow's milk only.

3/ Greasy basis.

4/ Total production.

n.a. = Not available.

Table 11.--Eastern Europe, Soviet Union, and Mainland China: Principal agricultural imports and exports, 1961-67

Country by commodity	1961	1962	1963	1964	1965	1966	1967
	<u>1,000 tons</u>						
BULGARIA							
Imports:							
Wheat.....	7.6	119.8	193.1	407.8	149.0	314.6	n.a.
Barley.....	68.7	55.4	95.4	162.9	133.4	---	n.a.
Corn.....	61.0	37.2	105.1	107.7	28.7	76.4	n.a.
Rice, milled.....	12.4	13.0	25.3	52.0	25.9	18.9	n.a.
Sugar, refined.....	99.0	124.1	117.6	131.0	154.6	145.4	n.a.
Rubber, crude.....	13.3	17.0	18.2	22.9	21.8	24.6	n.a.
Cotton, lint.....	30.3	47.5	31.8	45.1	47.8	54.0	51.0
Wool, scoured.....	1.3	1.1	1.7	2.2	1.5	2.2	2.4
Hides and skins.....	2.5	2.5	3.6	3.3	2.8	8.1	n.a.
Exports:							
Pigs, for slaughter 1/.....	137.2	138.6	91.5	115.2	321.6	379.4	n.a.
Pork.....	13.1	10.0	4.5	1.4	8.3	12.3	n.a.
Poultry meat.....	7.2	6.8	6.6	7.5	9.7	10.1	n.a.
Cheese.....	10.7	10.5	4.0	11.4	15.1	12.2	n.a.
Eggs 2/.....	534.0	442.2	331.2	400.7	508.0	479.8	580.0
Wheat.....	10.4	2.0	28.2	7.0	9.5	400.2	n.a.
Corn.....	104.3	82.7	73.5	244.9	43.4	186.7	n.a.
Fruits, fresh 3/.....	198.1	260.9	291.7	230.5	352.1	192.5	n.a.
Fruit puree.....	38.9	49.9	39.8	48.9	32.3	24.8	n.a.
Fruit, canned.....	39.5	39.5	47.2	52.6	51.2	47.4	n.a.
Jams and jellies.....	44.9	46.2	51.5	45.5	39.5	28.9	n.a.
Vegetables, fresh 4/.....	324.3	317.6	286.2	327.2	226.4	218.0	n.a.
Vegetables, canned.....	85.9	87.3	81.0	93.6	93.5	134.5	n.a.
Tomato puree.....	35.4	38.4	34.6	33.8	36.1	43.9	n.a.
Wine, grape.....	40.1	37.9	52.4	51.9	54.4	89.6	n.a.
Tobacco, oriental.....	61.3	52.6	77.7	81.5	78.2	71.7	76.0
Sunflower seed.....	43.5	92.4	32.8	111.4	91.5	155.8	n.a.
CZECHOSLOVAKIA							
Imports:							
Meat and meat products 5/.....	83	89	96	62	48	75	81
Poultry meat.....	6	9	8	10	8	9	8
Butter.....	17	15	20	10	12	11	13
Eggs 2/.....	74	32	23	61	48	64	70
Wheat.....	1,004	927	1,365	1,489	924	1,032	1,205
Rice, milled.....	85	82	88	89	73	92	60
Barley.....	114	144	156	396	595	135	162
Corn.....	130	300	289	433	155	282	138
Rye.....	182	172	62	41	32	n.a.	n.a.
Other feed.....	212	84	192	292	500	276	334
Fruits.....	144	158	159	184	241	190	241
Vegetables.....	106	137	119	112	144	132	149
Nuts.....	7	5	8	6	7	8	8
Coffee.....	14	9	12	11	10	11	12
Cocoa beans.....	15	12	13	13	14	19	16
Tea.....	1	1	2	2	1	2	1
Wine 6/.....	409	390	384	474	471	468	498
Tobacco.....	20	13	13	18	17	13	18
Raw cow hides.....	41	42	37	40	44	44	40
Peanuts.....	49	32	46	42	37	53	26
Soybeans.....	26	23	21	26	25	26	22
Sunflower seed.....	47	66	33	33	17	43	59
Wool, scoured.....	22	20	20	21	23	21	17
Cotton, lint.....	122	92	105	106	100	113	103
Jute.....	17	18	20	14	14	15	15

Table 11.--Eastern Europe, Soviet Union, and Mainland China: Principal agricultural imports and exports, 1961-67--Continued

Country by commodity	1961	1962	1963	1964	1965	1966	1967
	1,000 tons						
CZECHOSLOVAKIA--Continued							
Exports:							
Eggs <u>2</u> /.....	154	54	99	74	66	60	41
Malt.....	163	155	178	157	178	192	205
Hops <u>7</u> /.....	4.3	3.7	4.9	5.4	4.7	5.0	n.a.
Sugar, refined.....	662	528	513	359	513	325	392
Beer <u>6</u> /.....	468	465	445	326	321	542	750
EAST GERMANY							
Imports:							
Meat, meat products, and							
canned meat.....	107.5	202.2	139.1	106.1	76.6	78.4	75.3
Butter.....	51.2	55.7	43.8	31.2	29.2	18.5	17.2
Cheese.....	21.2	18.2	16.8	16.5	14.0	14.3	12.5
Eggs and egg products <u>2</u> /.....	20.8	55.3	164.8	113.3	19.5	40.1	63.3
Wheat.....	1,250.0	1,238.0	1,023.0	1,303.0	1,225.0	1,350.0	1,184.0
Rice.....	30.3	30.4	30.3	26.8	40.4	62.0	49.8
Barley.....	128.0	141.0	89.0	219.0	289.0	126.0	203.0
Corn.....	177.0	412.0	287.0	309.0	183.0	295.0	352.0
Rye.....	245.0	448.0	282.0	101.0	1.0	111.0	---
Fruit, tropical (including							
dried).....	100.2	100.2	83.3	94.5	114.3	152.3	199.0
Fruit, fresh.....	112.3	110.9	153.2	178.7	169.1	137.0	139.3
Fruit, canned.....	25.5	19.6	18.5	38.5	30.7	33.3	30.3
Fruit juice.....	14.1	11.6	13.5	14.0	9.6	13.2	11.4
Nuts.....	9.9	11.5	9.8	10.0	13.1	15.5	13.6
Potatoes.....	90.4	129.1	128.2	409.8	84.4	93.2	107.6
Vegetables, fresh.....	102.9	94.6	130.5	148.8	88.6	104.2	90.3
Vegetables, canned.....	27.9	24.6	33.2	92.2	57.4	57.3	78.1
Legumes.....	7.2	7.2	8.3	22.8	5.8	10.3	11.3
Honey.....	2.5	2.2	1.7	2.9	1.8	2.5	2.9
Coffee.....	27.1	29.0	34.4	36.5	35.8	37.4	40.2
Cocoa beans.....	13.4	13.9	14.1	14.4	15.3	18.0	16.2
Tea.....	1.6	1.8	1.4	1.4	1.9	1.1	1.2
Fodder crops <u>8</u> /.....	8.1	6.9	10.0	11.8	10.3	13.2	9.1
Wine and champagne <u>6</u> /.....	519.2	647.1	705.9	642.5	676.3	782.1	852.4
Spirits <u>6</u> /.....	8.9	18.0	6.9	10.0	6.3	51.4	35.6
Beer <u>6</u> /.....	78.3	77.9	78.2	78.6	78.1	80.8	82.1
Tobacco, smoking and cured....	22.4	24.2	29.2	27.2	27.8	22.5	26.1
Hides and skins <u>9</u> /.....	22.1	24.3	10/20.1	21.0	19.2	18.4	17.2
Oilseeds.....	126.6	108.2	137.3	154.6	139.6	163.6	148.4
Cotton, lint.....	92.5	123.6	93.5	96.2	99.3	90.3	84.7
Wool, scoured.....	23.0	21.2	23.3	22.3	24.7	18.8	19.2
Animal fats, refined and							
unrefined.....	2.5	10.4	3.2	2.2	---	---	0.3
Vegetable oils, raw and							
refined.....	121.5	148.8	136.3	119.1	106.1	120.3	110.7
Exports:							
Sugar, refined.....	377.3	213.1	195.7	172.9	97.5	191.0	145.6
HUNGARY							
Imports:							
Meat, raw.....	19.0	20.2	37.0	43.4	34.2	31.0	58.2
Meat, canned.....	---	0.1	1.3	1.2	3.5	2.6	1.2
Butter.....	---	---	---	0.9	5.7	4.5	5.4
Wheat.....	402.6	172.7	340.4	276.5	113.0	124.0	217.0

--Continued

Table 11.--Eastern Europe, Soviet Union, and Mainland China: Principal agricultural imports and exports, 1961-67--Continued

Country by commodity	1961	1962	1963	1964	1965	1966	1967
	1,000 tons						
HUNGARY--Continued							
Imports--Continued							
Rice, husked and broken.....	21.1	17.4	18.8	11.2	21.4	40.6	24.6
Barley.....	64.3	54.5	118.0	100.4	382.0	40.0	10.0
Corn.....	120.2	429.2	161.9	140.2	71.0	56.0	---
Rye.....	---	---	28.7	3.8	---	---	50.0
Flour and grits 11/.....	45.5	52.3	29.9	73.6	11.7	7.6	---
Fruit, citrus.....	18.6	32.2	28.1	36.3	36.5	43.1	45.5
Coffee.....	3.3	5.5	6.9	11.0	12.6	13.5	17.4
Cocoa beans.....	3.3	6.3	7.2	7.0	12.5	9.8	9.8
Tea.....	0.4	0.6	0.8	0.5	2.2	0.8	0.6
Tobacco.....	7.5	6.5	4.6	5.0	4.9	8.1	15.6
Hides and skins.....	21.1	19.1	18.8	21.4	24.6	24.1	24.4
Cotton, lint.....	68.0	65.1	63.6	68.4	72.1	78.2	88.6
Wool, scoured.....	4.3	3.8	4.2	4.6	3.4	5.2	6.0
Jute.....	6.4	9.3	8.0	9.1	8.8	12.1	6.5
Fats and lard.....	19.4	12.1	17.8	17.8	9.2	7.1	27.7
Exports:							
Cattle, for slaughter 1/.....	92.4	97.2	72.5	54.9	71.8	80.7	91.9
Pigs, for slaughter 1/.....	77.8	155.2	17.9	6.1	28.8	28.3	9.7
Meat, raw.....	21.7	40.7	36.8	31.0	39.8	48.2	46.8
Meat, canned.....	n.a.	n.a.	4.7	5.6	7.5	6.5	7.9
Poultry, for slaughter.....	15.2	20.7	26.4	27.2	36.1	34.5	39.0
Butter.....	4.0	4.7	5.4	4.4	5.9	5.1	10.6
Cheese.....	7.7	7.5	8.8	8.4	6.2	7.5	9.3
Eggs 2/.....	135.1	60.0	90.7	197.6	344.3	288.0	423.4
Wheat.....	93.5	31.9	41.6	13.9	96.2	1.0	170.5
Corn.....	53.5	34.2	25.5	63.9	92.6	42.7	19.7
Flour and grits.....	26.7	15.9	16.4	16.0	14.4	16.8	18.3
Fruit, fresh.....	146.7	113.0	207.0	205.0	195.0	198.0	256.0
Fruit, canned.....	n.a.	13.2	18.3	20.6	25.6	28.4	30.3
Potatoes.....	69.8	24.3	42.6	37.9	30.8	37.2	113.8
Beans.....	2.7	4.7	15.5	11.7	28.3	6.6	8.7
Peas.....	27.3	31.4	21.6	17.6	28.8	19.6	25.7
Vegetables, fresh.....	71.7	98.6	138.3	105.0	113.0	147.0	122.0
Vegetables, canned.....	n.a.	75.6	98.1	142.4	138.3	174.8	213.1
Sugar, refined.....	177.0	214.8	222.9	147.0	139.0	63.0	42.0
Honey.....	3.2	4.6	4.3	4.6	5.0	5.0	5.7
Wine 6/.....	410.8	335.2	401.8	569.4	689.0	720.0	728.0
Tobacco.....	n.a.	n.a.	n.a.	9.7	9.5	7.2	10.7
Oilseeds.....	n.a.	n.a.	n.a.	23.3	15.6	15.1	18.2
Sunflower seed.....	n.a.	n.a.	n.a.	14.3	10.4	13.7	17.0
Sunflower seed oil.....	12.4	22.0	26.8	21.2	15.0	24.7	30.9
Oil, edible.....	---	---	---	3.2	3.0	5.9	.5
Fat, animal.....	10.5	9.4	8.4	9.7	8.0	3.7	3.7
POLAND							
Imports:							
Meat and meat products.....	9.8	5.0	47.6	37.7	39.4	52.8	43.3
Butter.....	3.0	---	4.7	8.4	2.4	---	3.0
Wheat.....	1,738.9	1,503.8	1,673.4	2,211.4	1,378.2	1,566.7	1,353.0
Rice, milled.....	60.2	47.9	99.2	54.9	67.2	67.2	65.3
Barley.....	317.0	278.0	432.0	287.0	485.0	139.2	417.6
Corn.....	50.7	144.8	99.4	186.1	784.5	187.6	199.8
Rye.....	313.4	247.3	409.1	---	---	70.3	---
Oats.....	---	---	5.0	13.8	32.9	---	---
Fruit, citrus.....	36.3	35.0	33.7	38.9	60.0	85.5	75.9

Table 11.--Eastern Europe, Soviet Union, and Mainland China: Principal agricultural imports and exports, 1961-67--Continued

Country by commodity	1961	1962	1963	1964	1965	1966	1967
	1,000 tons						
POLAND--Continued							
Imports--Continued							
Fruit, fresh.....	24.6	45.4	36.0	6.0	35.2	25.5	33.6
Fruit, other.....	2.2	6.0	4.5	5.0	5.4	6.7	5.3
Vegetables, fresh.....	21.4	58.0	28.4	25.4	37.2	30.3	31.9
Vegetables, frozen.....	6.8	9.3	9.4	1.7	3.3	8.6	5.2
Coffee.....	4.2	7.2	8.9	10.9	15.4	19.5	20.1
Cocoa beans.....	9.7	11.5	12.2	14.0	17.3	12.3	20.0
Tea.....	2.3	4.1	4.9	4.7	5.7	7.7	7.3
Tobacco.....	11.6	15.1	19.3	15.8	16.5	13.8	10.4
Cotton, lint.....	140.0	121.0	123.0	152.0	143.0	156.0	133.4
Oilseeds.....	65.8	32.6	59.1	61.3	141.9	69.3	64.5
Vegetable oils, edible.....	37.0	51.8	12.4	68.0	31.9	24.0	47.2
Wool, scoured.....	17.6	18.5	14.9	15.7	17.3	15.2	16.5
Exports:							
Pigs, for slaughter <u>12</u> /.....	64.5	45.6	8.6	9.1	9.2	2.4	1.9
Cattle, for slaughter <u>12</u> /.....	5.3	8.8	8.7	12.3	16.2	12.1	4.0
Meat, fresh and frozen.....	63.3	67.9	33.2	22.4	64.0	18.6	31.7
Bacon.....	48.7	50.6	50.8	52.2	51.9	52.5	54.9
Meat, canned.....	19.7	20.6	23.3	24.0	25.6	27.3	27.8
Ham, canned.....	17.3	16.8	17.7	19.8	22.3	23.2	24.4
Poultry.....	19.0	13.7	12.1	15.9	19.2	18.8	17.3
Butter.....	26.7	27.5	18.6	20.0	18.3	19.3	23.4
Eggs <u>2</u> /.....	1,443.0	1,219.0	783.0	638.0	751.0	513.5	551.2
Barley.....	102.9	35.2	59.9	59.9	56.9	89.6	57.7
Rye.....	---	---	---	---	---	19.5	65.5
Potatoes.....	150.5	381.2	248.7	1,015.3	532.8	453.3	423.7
Vegetables, fresh.....	53.6	22.5	65.1	103.1	92.0	74.4	53.2
Sugar, refined.....	403.5	468.8	160.1	358.3	383.3	227.5	214.9
Sugar, raw.....	257.5	150.5	53.3	145.2	90.1	100.9	140.8
Beer <u>6</u> /.....	20.1	68.5	61.0	150.3	203.6	182.6	142.3
Lard.....	8.2	23.2	4.3	0.4	5.4	27.4	16.0
ROMANIA							
Imports:							
Rice.....	15.8	23.1	43.1	29.2	36.7	29.5	32.0
Fruit, citrus.....	18.3	21.1	19.6	20.0	22.0	26.2	30.1
Olives.....	7.0	6.1	8.1	6.4	6.9	5.3	5.8
Sugar, refined.....	30.4	37.0	44.9	---	---	---	---
Cocoa beans (including powdered cocoa).....	2.1	2.5	3.8	3.7	5.6	5.1	5.4
Hides and skins.....	5.3	13.6	6.5	12.2	14.4	20.8	21.8
Rubber, crude.....	11.5	13.8	19.2	22.3	19.2	24.9	26.7
Cotton, lint.....	60.8	60.8	65.4	66.6	67.0	76.8	71.9
Wool, scoured.....	2.9	0.3	0.3	0.8	1.4	1.5	1.8
Vegetable oils, edible.....	2.6	1.5	0.8	2.0	0.8	2.9	2.1
Exports:							
Eggs <u>2</u> /.....	107.7	131.6	81.2	148.3	245.8	286.2	290.0
Grain, total (excluding seed)..	1,208.4	1,067.9	1,408.8	1,234.2	882.2	1,303.0	2,339.4
Fruit, fresh.....	47.0	42.8	69.0	53.6	96.5	54.6	67.0
Fruit, canned.....	85.2	75.9	107.6	93.7	86.0	97.2	100.8
Grapes.....	24.5	54.9	52.0	40.7	60.3	37.8	46.3
Vegetables, fresh.....	43.5	71.1	82.1	105.4	136.8	127.6	127.1
Vegetables, canned.....	11.7	15.4	20.7	29.5	25.9	35.9	40.5
Potatoes.....	93.0	20.9	38.1	8.5	11.1	21.1	31.4
Sugar, refined.....	147.4	310.8	75.6	52.9	34.5	106.0	192.2
Wine.....	31.3	20.7	26.8	42.4	43.3	46.0	52.7

--Continued

Table 11.--Eastern Europe, Soviet Union, and Mainland China: Principal agricultural imports and exports, 1961-67--Continued

Country by commodity	1961	1962	1963	1964	1965	1966	1967
	1,000 tons						
ROMANIA--Continued							
Exports--Continued							
Wool, scoured.....	1.0	0.9	1.0	0.9	1.2	1.6	1.5
Animal fats, edible.....	9.6	8.8	7.9	12.0	19.3	44.3	48.6
Vegetable oils, edible.....	33.7	47.6	39.7	37.1	33.3	76.9	110.0
YUGOSLAVIA							
Imports:							
Pigs, for slaughter.....	16.2	22.5	9.0	11.6	21.5	27.6	6.8
Milk, powdered.....	20.9	18.1	23.1	19.7	13.3	14.2	2.7
Eggs.....	2.4	3.6	3.8	3.8	4.0	10.5	9.7
Wheat.....	744.8	732.9	1,438.3	602.4	1,192.6	1,357.2	409.0
Rice, milled.....	13.6	4.1	38.9	36.9	26.4	26.2	9.6
Barley.....	---	13.8	69.0	61.1	1.1	0.6	insig.
Corn.....	1.1	60.4	32.7	116.0	0.7	---	---
Fruit, citrus.....	45.8	39.8	39.4	62.6	66.3	82.9	98.5
Potatoes.....	1.0	22.8	7.7	0.7	24.2	14.6	0.3
Sugar, refined.....	107.3	131.4	54.6	106.3	94.2	246.2	131.2
Coffee, raw.....	9.6	10.3	17.8	15.7	17.7	24.7	30.5
Cocoa beans.....	6.6	3.6	9.6	6.7	13.8	13.9	8.9
Tobacco.....	0.4	9.9	10.1	3.4	0.1	1.0	insig.
Hides, raw.....	21.3	20.6	22.4	27.4	25.1	26.7	35.7
Oilseeds.....	9.4	12.3	29.5	35.3	28.2	26.3	7.5
Rubber, crude.....	14.3	13.9	15.1	17.0	16.5	15.4	14.4
Cotton, lint.....	57.3	64.2	72.2	81.7	90.5	87.4	90.7
Jute.....	6.9	11.1	15.0	12.2	13.6	13.9	8.7
Wool, scoured.....	12.1	6.4	13.9	18.2	17.7	13.4	14.3
Vegetable oils, edible.....	38.4	41.4	30.4	54.5	19.1	21.8	92.1
Lard.....	1.7	2.2	7.4	9.4	0.4	2.4	11.4
Tallow.....	9.9	15.2	11.8	6.0	16.1	0.3	12.4
Exports:							
Cattle, for slaughter.....	55.6	37.0	44.5	19.1	11.2	21.9	33.9
Sheep, for slaughter.....	15.8	8.7	7.2	0.4	1.9	3.4	5.4
Hogs, for slaughter.....	1.1	1.1	0.1	13/	0.4	0.2	0.6
Horses, for slaughter.....	27.4	29.1	27.7	16.8	11.9	16.3	23.6
Meat, fresh.....	51.2	79.6	70.4	111.2	126.0	112.6	103.6
Meat, canned.....	23.4	21.1	23.8	30.4	36.9	23.8	24.2
Cheese.....	0.6	8.8	0.5	0.9	1.2	1.8	1.2
Eggs.....	13.6	6.2	5.1	3.6	2.0	4.6	2.5
Corn.....	376.4	27.8	104.3	17.7	51.4	356.9	786.7
Feed grains, other.....	5.1	19.4	5.3	2.9	1.1	74.9	1,190.7
Fruit, fresh.....	24.4	71.7	33.6	61.2	35.2	19.5	29.2
Prunes.....	15.2	14.6	33.0	17.6	13.0	4.9	7.3
Fruit pulp.....	13.4	16.2	16.0	13.7	13.2	13.2	13.8
Potatoes.....	14.9	.2	.7	.3	.3	9.6	3.4
Beans, dry.....	10.3	.8	.3	.4	7.8	7.6	11.1
Hops.....	5.5	3.9	4.7	4.8	4.9	4.4	4.2
Sugar, refined.....	24.6	21.2	25.0	12.3	insig.	2.2	11.8
Wine.....	39.0	50.0	43.3	49.6	40.0	37.0	44.1
Tobacco.....	15.9	15.3	16.8	22.7	23.2	20.9	19.2
Oilseeds.....	4.5	1.7	3.8	7.2	13.0	4.6	9.7
Hemp, all.....	13.4	10.3	13.5	10.4	8.8	3.7	4.6
SOVIET UNION							
Imports:							
Animals, for slaughter.....	152.5	136.9	86.2	79.0	118.5	116.0	102.0

Table 11.--Eastern Europe, Soviet Union, and Mainland China: Principal agricultural imports and exports, 1961-67--Continued

Country by commodity	1961	1962	1963	1964	1965	1966	1967
	1,000 tons						
SOVIET UNION--Continued							
Imports--Continued							
Meat and meat products.....	59.7	149.1	37.4	119.9	252.2	133.2	57.5
Eggs <u>2/</u>	160.5	66.3	76.7	532.0	706.1	609.3	749.0
Wheat.....	655.9	45.1	3,052.5	7,281.4	6,375.1	7,582.3	1,827.8
Flour, in terms of grain <u>14/</u>	28.8	28.3	362.7	1,251.9	376.9	420.0	271.5
Rice, milled.....	19.9	337.5	193.6	363.1	237.9	275.4	397.3
Corn.....	22.6	---	---	---	---	163.5	356.8
Fruit, fresh.....	316.5	345.6	407.2	439.6	500.9	447.3	536.8
Fruit, dried.....	83.9	77.2	113.4	76.6	85.3	69.4	100.4
Vegetables.....	281.6	291.7	347.9	462.0	349.6	389.0	446.3
Sugar, refined equivalent.....	3,242.2	2,242.3	1,027.7	1,680.1	2,100.5	1,659.3	2,234.5
Coffee, cocoa, and tea.....	65.2	87.4	105.4	129.0	156.0	106.1	129.5
Tobacco.....	57.8	66.6	93.4	129.1	104.1	65.2	61.0
Hides and skins <u>15/</u>	18.5	19.5	26.4	28.9	22.8	26.9	30.2
Oilseeds.....	90.2	57.3	65.2	75.2	156.8	48.9	44.2
Rubber, crude.....	360.3	361.7	298.4	186.1	271.2	311.1	278.5
Cotton, lint.....	141.6	150.2	225.6	144.9	182.9	172.7	144.5
Wool, scoured.....	55.3	48.6	42.4	46.3	52.8	61.3	49.8
Vegetable oils, edible.....	54.4	15.1	37.3	43.2	68.1	47.4	27.7
Exports:							
Meat and meat products.....	66.0	133.7	183.0	60.9	31.7	118.4	175.4
Butter.....	55.6	69.7	65.0	25.3	43.0	54.1	63.4
Wheat.....	4,800.6	4,765.2	4,105.6	2,030.5	1,662.6	2,805.3	5,284.0
Flour, in terms of grain <u>14/</u>	322.0	322.3	354.4	410.9	341.9	391.8	483.1
Rye.....	1,088.0	1,300.3	815.0	150.3	36.9	275.1	336.2
Barley.....	1,006.8	466.8	594.2	665.8	2,067.9	290.4	452.4
Oats.....	179.9	25.3	22.0	28.3	11.8	11.5	10.7
Corn.....	405.6	1,256.7	723.1	638.6	551.1	174.4	164.7
Sugar, refined.....	16/886.3	792.4	802.4	347.8	604.1	992.8	1,032.3
Oil cake.....	386.1	348.6	193.2	45.5	129.2	390.5	387.9
Tobacco, raw.....	2.9	1.8	1.8	3.2	2.1	1.3	2.0
Oilseeds.....	120.7	112.7	101.2	113.5	88.2	147.2	341.2
Cotton, lint.....	382.6	343.6	321.5	393.6	457.7	507.8	534.4
Wool, scoured.....	28.1	24.2	27.6	24.4	26.4	27.8	20.1
Vegetable oils, edible.....	121.8	152.5	258.9	189.9	242.1	455.7	707.2
MAINLAND CHINA <u>17/</u>							
Imports:							
Wheat.....	2,622.5	4,419.1	4,394.0	5,542.2	5,249.8	6,375.2	4,261.2
Rice.....	62.4	4.7	97.1	76.4	112.3	51.5	n.a.
Barley.....	1,099.4	486.6	25.0	567.5	23.6	---	---
Corn.....	44.3	491.2	13.4	377.2	71.8	20.2	n.a.
Rye.....	100.1	246.9	---	---	---	---	---
Oats.....	65.3	47.4	26.9	134.6	41.9	---	---
Other.....	---	23.5	---	29.3	---	---	n.a.
Flour <u>11/</u>	450.8	279.9	0.9	68.4	21.1	---	---
Total grains.....	4,444.8	5,999.3	4,557.3	6,795.6	5,520.5	6,446.9	4,261.2
Dates.....	32.3	63.0	71.3	62.1	35.3	59.8	n.a.
Sugar, raw.....	1,534.4	937.9	511.4	407.6	419.1	619.7	n.a.
Cotton, raw.....	58.3	67.5	143.1	105.2	168.5	106.6	87.5
Jute.....	14.6	13.0	22.9	56.7	60.6	52.2	n.a.
Sisal.....	0.5	2.7	3.8	9.6	7.2	13.1	n.a.
Fats and oils, animal.....	14.6	27.6	21.6	30.1	17.7	15.2	n.a.
Exports:							
Cattle <u>1/</u>	12.6	17.1	23.7	46.1	94.8	6.2	n.a.
Sheep and goats <u>1/</u>	97.8	---	---	7.8	12.4	10.9	n.a.

--Continued

Table 11.--Eastern Europe, Soviet Union, and Mainland China: Principal agricultural imports and exports, 1961-67--Continued

Country by commodity	1961	1962	1963	1964	1965	1966	1967
	1,000 tons						
MAINLAND CHINA--Continued							
Exports--Continued							
Swine <u>1/</u>	391.0	785.6	1,285.5	1,717.3	1,879.2	1,951.5	n.a.
Meat, fresh.....	28.8	10.6	23.6	76.5	139.5	153.6	n.a.
Meat, dried and salted.....	1.7	2.3	2.0	3.1	4.5	4.8	n.a.
Meat preparations.....	4.6	6.0	8.3	23.9	39.3	39.3	n.a.
Eggs, in the shell.....	15.0	25.8	34.8	40.0	42.4	48.1	n.a.
Eggs, not in shell.....	3.1	4.8	10.2	5.4	10.5	15.8	n.a.
Wheat.....	121.4	89.1	109.9	110.8	n.a.	n.a.	n.a.
Rice <u>18/</u>	445.9	573.2	627.6	782.8	740.0	1,197.0	1,050.0
Corn.....	30.3	0.8	109.6	169.6	244.5	146.3	n.a.
Total grains.....	595.5	667.7	858.8	1,092.9	994.8	1,260.6	n.a.
Oranges and tangerines.....	29.5	29.9	37.3	38.6	39.3	42.8	n.a.
Fruit, other citrus.....	10.2	2.6	2.8	3.7	6.4	7.2	n.a.
Bananas, fresh.....	11.1	12.5	8.7	17.0	19.0	32.2	n.a.
Apples, fresh.....	36.0	62.4	71.0	80.8	88.8	89.4	n.a.
Pears, fresh.....	0.2	0.5	1.9	16.5	28.7	34.4	n.a.
Potatoes, fresh.....	6.1	7.5	11.2	25.0	34.2	53.6	n.a.
Beans and peas, dry.....	61.5	58.1	57.8	62.2	101.9	148.0	n.a.
Onions.....	4.6	5.0	6.7	12.1	15.4	17.4	n.a.
Sugar, raw.....	126.8	284.5	217.0	361.7	419.3	522.8	n.a.
Tea.....	34.3	27.8	27.7	31.9	31.6	34.1	n.a.
Oilseed cake.....	6.3	4.5	9.2	19.3	29.3	25.8	n.a.
Peanuts.....	2.1	3.1	3.1	25.4	45.7	63.8	n.a.
Soybeans.....	335.4	342.2	332.1	498.2	576.2	550.1	545.0
Castor seed.....	1.1	1.9	5.3	10.7	14.6	56.3	n.a.
Rape and mustard seed.....	0.8	---	0.2	---	5.8	29.9	n.a.
Total oilseeds.....	339.4	347.2	340.7	534.3	642.3	700.1	n.a.
Silk.....	1.8	1.1	1.2	1.8	3.3	6.0	n.a.
Wool, greasy.....	2.0	4.7	10.6	14.3	15.6	17.6	n.a.
Cottonseed oil.....	1.1	insig.	---	---	22.2	39.6	n.a.
Peanut oil.....	1.9	0.7	0.3	0.5	4.9	24.3	n.a.
Rape and mustard oil.....	1.9	insig.	---	---	3.8	31.8	n.a.
Tung oil.....	15.6	16.5	12.4	17.1	19.1	17.5	n.a.
Total vegetable oils.....	20.5	17.2	12.7	17.6	50.0	113.2	n.a.

1/ 1,000 head. 2/ Millions, fresh equivalent. 3/ Includes watermelons and musk melons. 4/ Includes potatoes. 5/ Including animals for slaughter in slaughter-weight equivalent. 6/ 1,000 hectoliters (1 hectoliter = 26.418 U.S. gallons). 7/ Converted from Customs Centners - 110 pounds. 8/ Undefined; believed to include hay, fodder, and forage crops. 9/ Salt weight. 10/ Cattle hides only. 11/ Grain equivalent. 12/ Slaughter weight. 13/ Less than 50 tons. 14/ 78 percent milling rate assumed. 15/ Millions. 16/ Includes 501,000 tons of raw sugar (equivalent to 472,600 tons refined) to Mainland China. 17/ Preliminary data, compiled from official export data of trading partners. 18/ Study Group on Rice, Twelfth Session, CCP:R1 68/Conf., Room Series 4, FAO, May 17, 1968.

n.a. = Not available.

Sources: Official statistical handbooks published by the various countries except Bulgaria and Mainland China. Some data for Bulgaria taken from Trade Yearbook, FAO, Vol. 21, 1967. Data for Mainland China from Supplementary Economic Statistics, Fourth Issue, FAO, August 1968.

Table 12.--Eastern Europe and Soviet Union: Agriculture in the economy and major agricultural inputs,
by country, 1967

Item	Unit	Bulgaria:	Czechoslovakia:	East Germany:	Hungary:	Poland:	Romania:	Yugoslavia:	USSR
Agriculture in the economy:									
Share of national income <u>2/</u>	Percent	31	10	13	22	18	29	1/28	22
Share of exports <u>3/</u>	Do.	1/59	9	n.a.	26	16	41	28	17
Share of imports <u>3/</u>	Do.	1/16	29	11	21	11	12	16	20
Rural population <u>4/5/</u>	Do.	53	n.a.	n.a.	56	50	1/61	6/50	45
Inputs in agriculture:									
Land:									
Agricultural land <u>7/</u>	Mil. ha.	5.9	7.1	6.4	6.9	19.8	8/14.8	14.6	609
Cultivated land <u>7/</u>	Do.	4.1	5.0	4.7	5.1	15.2	8/9.8	7.6	224
Labor:									
Agricultural labor force <u>4/9/</u>	Millions	2.1	1.3	1.4	1.5	6.2	6.8	4.5	42.6
Share of total labor force <u>4/9/</u> ...	Percent	46	19	17	29	39	60	50	35
Cultivated land per worker.....	Hectares	2.0	3.8	3.4	3.4	2.4	1.4	1.7	5.3
Tractors: <u>10/</u>									
Tractors, physical units.....	Thousand	1/45	n.a.	139	68	153	93	51	1,739
Tractors, 15 h.p. units.....	Do.	1/72	186	n.a.	98	183	156	n.a.	3,485
Average h.p. per tractor.....	H.p.	1/24	n.a.	n.a.	22	18	25	n.a.	30.1
Cultivated land per 15-h.p. unit:	Hectares	1/58	27	n.a.	52	83	63	n.a.	64
Fertilizer consumption (active substance) per ha. of cultivated land.....	Kilograms	146	179	288	96	104	45	68	35

1/ 1966. 2/ As defined and calculated by the respective countries and not strictly comparable with the national income concept in Western national income accounts. 3/ Definition of agricultural commodities varies by country. 4/ U.S. Bureau of the Census data. 5/ Hungary--beginning of year; Bulgaria, Romania, Yugoslavia--midyear; Czechoslovakia, Poland, USSR--end of year. East Germany estimated. 6/ 1961 census. 7/ Midyear or end of year. 8/ 1965. 9/ Midyear. Data pertain to economically active population, including unemployed. 1967 data preliminary. 10/ End of year.

n.a. = Not available.

Table 13.--Eastern Europe and Soviet Union: The Socialist sector's share of agricultural resources and output, by country, 1967 1/

Resource or product	Bulgaria	Czecho- slovakia	East Germany	Hungary	Poland	Romania	Yugoslavia	USSR
	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
	- - - - -	- - - - -	- - - - -	Percent	- - - - -	- - - - -	- - - - -	- - - - -
Land: <u>2/</u>								
Agricultural.....	85	85	84	84	15	3/91	30	99
Arable.....	86	89	90	85	15	<u>3/89</u>	15	97
Labor force <u>4/</u>	96	n.a.	79	96	8	<u>3/90</u>	n.a.	70
Tractors, physical units <u>5/</u>	100	100	100	95	88	<u>3/98</u>	68	100
Livestock: <u>6/</u>								
Cattle.....	83	84	70	55	15	50	7	71
of which cows.....	76	79	67	49	10	41	4	59
Hogs.....	77	76	64	40	12	50	16	73
Sheep.....	66	66	75	84	15	49	4	79
Agricultural output:								
Grains.....	3/88	88	96	72	14	89	22	98
Potatoes.....	<u>3/76</u>	69	92	49	8	<u>3/54</u>	3	37
Sugarbeets.....	<u>3/99</u>	99	99	100	13	100	57	100
Meat.....	<u>3/68</u>	80	n.a.	n.a.	14	<u>3/46</u>	26	60
Milk.....	<u>3/82</u>	82	n.a.	49	12	<u>3/45</u>	14	61
Eggs.....	<u>3/57</u>	45	n.a.	16	5	<u>3/16</u>	n.a.	37
Total <u>7/</u>	<u>3/76</u>	78	n.a.	n.a.	13	n.a.	<u>3/27</u>	69

1/ Livestock, resources and output on private plots of collective and state farm workers and other are not included in the "Socialist" sector. 2/ End of year or midyear. 3/ 1966 data. 4/ Share of the agricultural labor force deriving at least part of its income from work in socialized agriculture. Bulgaria and USSR estimated. Soviet studies claim that 40 percent of all labor time expended in agriculture is in the private sector. 5/ End of year; Poland includes agricultural circles. 6/ Hungary--March; Bulgaria--January; Poland--June; Soviet Union, Czechoslovakia, East Germany, Romania, and Yugoslavia--end of year. 7/ Value of gross output.

n.a. = Not available.

Table 14.--Conversion equivalents

Pounds per bushel

Wheat and potatoes	60
Rye and corn	56
Barley	48
Oats	32

One kilogram	equals	2.2046 pounds
One centner or metric quintal	"	220.46 pounds
One metric ton	"	10. centners or 2204.6 pounds
One hectare	"	2.471 acres
One acre	"	0.4 hectare
One kilometer	"	0.6 mile

Metric tons to bushels

<u>One metric ton</u>	<u>Bushels</u>
Wheat and potatoes	36.743
Rye and corn	39.368
Barley	45.929
Oats	68.894

Bushels to metric tons

<u>One bushel</u>	<u>Metric tons</u>
Wheat and potatoes02722
Rye and corn02540
Barley02177
Oats01452

To convert centners per hectare to bushels per acre,
multiply by:

Wheat and potatoes	1.487
Rye and corn	1.593
Barley	1.8587
Oats	2.788

To convert bushels per acre to centners (metric quintals),
per hectare multiply by:

Wheat and potatoes	0.6725
Rye and corn	0.6277
Barley	0.5380
Oats	0.3587

One metric ton of seed cotton = 1.562 bales of 480 pounds.

One metric ton of ginned cotton = 4.593 bales of 480 pounds.



UNITED STATES DEPARTMENT OF AGRICULTURE
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OFFICIAL BUSINESS

